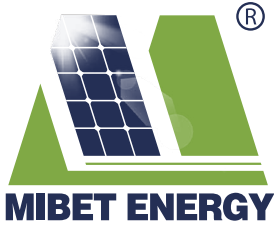


For more info about the photovoltaic mounting system solution, please call us or look through Mibet' s website.

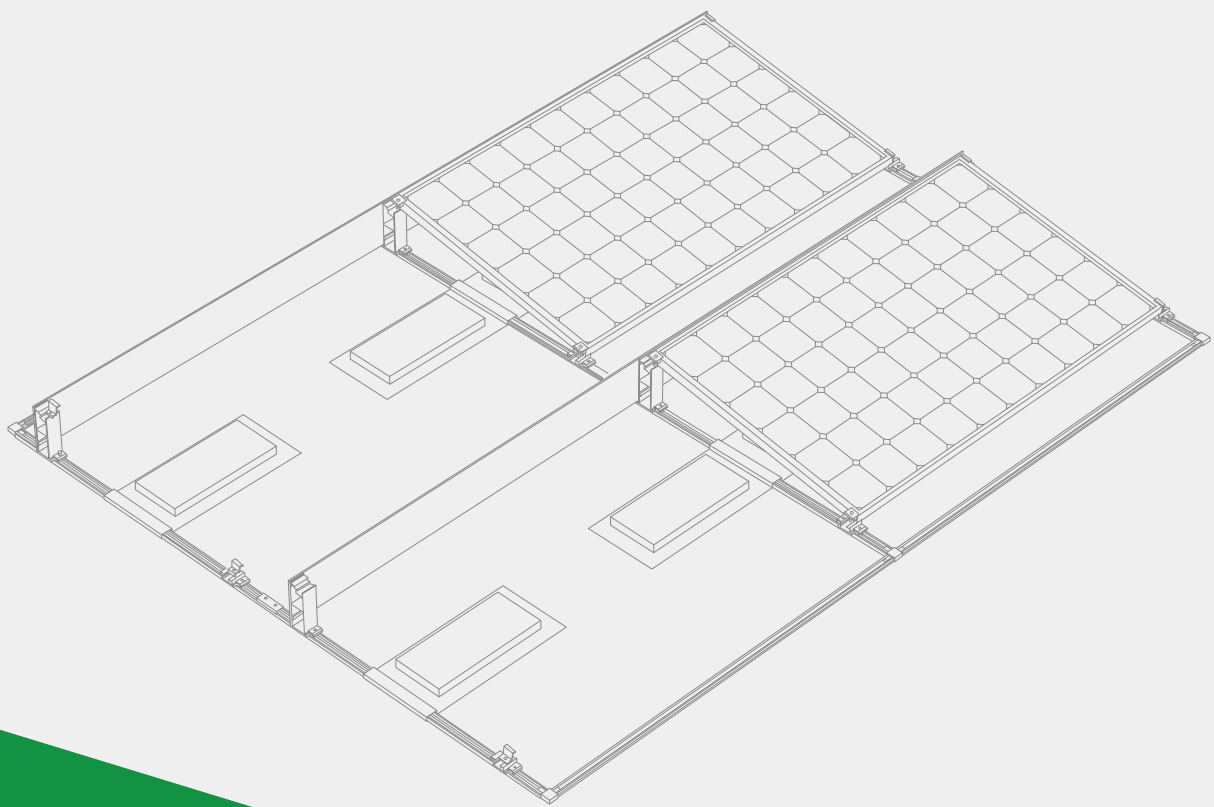


MRac[®]
Rooftop PV Mounting System Solutions



XIAMEN MIBET NEW ENERGY CO.,LTD.
Add: No.45, Sushan Road, Jimei District, Xiamen, China
Tel: 86-592-3754999,86-592-6771595
Fax: 86-592-6771575
E-mail: sales@mbt-energy.com
Web: www.mbt-energy.com

MIBET ENERGY
选择绿色 选择迈贝特 | do My BesT , to be the best!



Enterprise Profile

Xiamen Mibet New Energy Co., Ltd. is a joint-stock enterprise headquartered in Xiamen which established with its leading patented technology and efficient service in renewable energy industry. Mibet has owned several independent intellectual property rights and focuses on the research and development, production, sales and service in renewable energy industry, especially in solar photovoltaic mounting systems and building integrated photovoltaic (BIPV). Since the establishment, Mibet's solar energy products has been sold to more than 100 countries and regions worldwide which made Mibet currently one of the largest solar photovoltaic exporters.

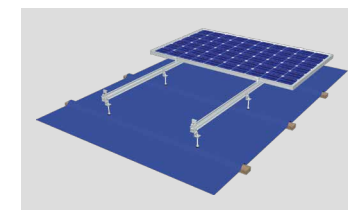
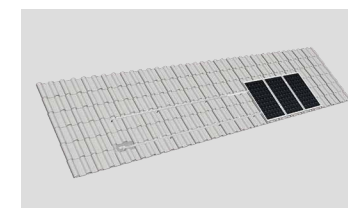
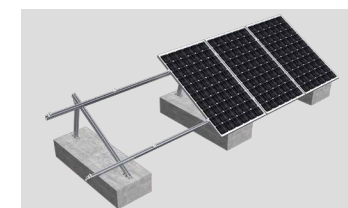
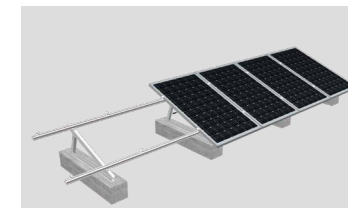
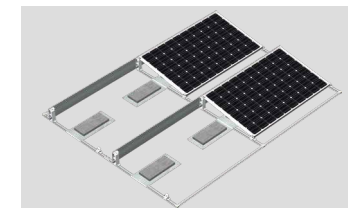
Led by an international R&D team, which consists of overseas returned scholars and professors in well-known universities, Mibet has launched a series of photovoltaic racking systems into PV market, such as MRac rooftop system, MRac ground system, MRac floating system, MRac smart tracking system, distributed pv mounting system, etc. Mibet's products have passed the ISO, TUV, UL, AS/NZS 1170 certification, etc, and become an industry leader in terms of the structural design and the system performance.

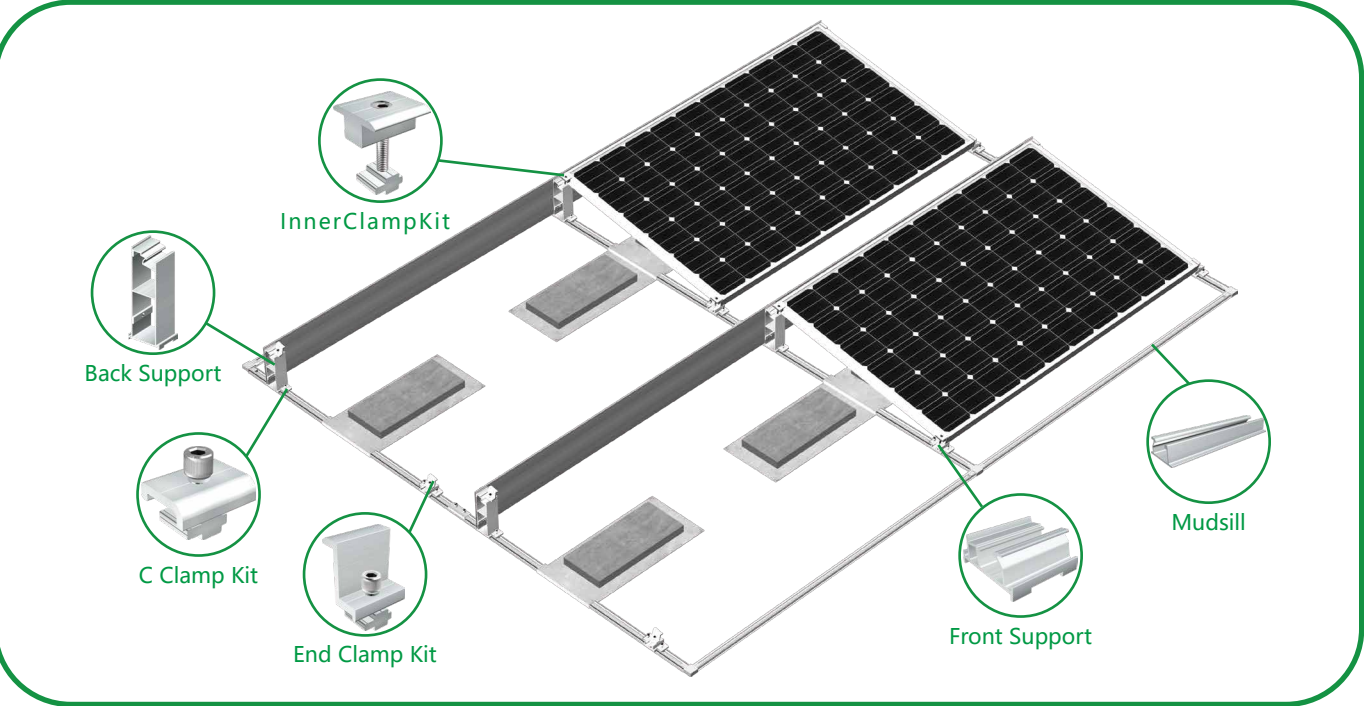
Besides, with strong marketing capability, Mibet not only has established a global marketing network, but also passed a series of certification, including the ISO9001:2008 quality system certification, ISO14001:2015 environmental management certification and OHSAS18001:2007 occupational health and safety management system certification. Our objective: leading the development of renewable industry and serving as top-class renewable enterprise!



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Technical Parameters

| | | | |
|-------------------------|---|------------------|--|
| System Name | MRac Roof Solar PV Mounting System Matrix I | Design Standard | AS/NZS 1170 、 DIN 1055 、 JIS C 8955: 2017 |
| Installation Site | Flat Roof, Ground | | International Building Code: IBC 2009 |
| Foundation | Concrete Roof | | California Building Code: CBC 2010 |
| Tilt Angle | 5 °, 10 ° | Material | AL6005-T5 (Anodized) |
| Wind Load | 60m/s | Fastener | SUS304 & Zinc-Nickel Alloy Electroplated Steel |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5 (Anodized) |
| Applicable Solar Module | Framed | Color | Silver or Customized |
| Panel Layout | Landscape | Warranty | 10-Year Warranty |

Overview

MRac Roof Solar PV Mounting System Matrix I is a non-penetration solution for flat rooftop. The system achieves high wind resistance performance and fast onsite installation with concrete ballast and patented structure design.

Save Installation Time With Highly Pre-assembled Structure



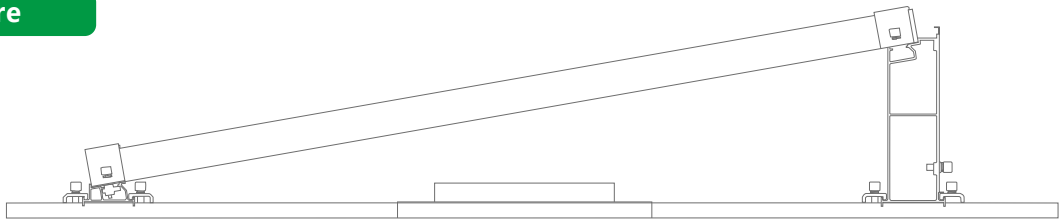
Customized design is available, flexible and multiple components can be chosen. Highly pre-assembled structure and no cutting or drilling on site save installation time and cost greatly.



Advantages

- > **High Durability Ensure the Structure Strength**
Professional structure design and high-density aluminum material ensure the stability and strength of the structure.
- > **Unique Matrix Design**
The matrix design further assures the stability of the whole system, and flexibly compatible with concrete block or ballast foundation.
- > **Reasonable Installation and Package Design**
Simplified components configuration lead to quicker installation and smaller package size, saving installation cost and freight.

Structure



Component Details

1



Front Support

Specification: L60
Material: AL6005-T5(Anodized)

2



Back Support

Specification: L60
Material: AL6005-T5(Anodized)

3



One-sided Ballasted Tray

Specification: 450*550
Material: Galvanized Sheet

4



Two-sided Ballasted Tray

Specification: 850*550
Material: Galvanized Sheet

5



End Clamp Kit

Components: End Clamp
Cross Module
Spring WasherM8
Hexagon Socket Head Bolt

6



Inter Clamp Kit

Components: Inter Clamp
Cross Module
Spring WasherM8
Hexagon Socket Head Bolt

7



C Clamp Kit

Components: C clamp
Cross Module
Spring WasherM8
Hexagon Socket Head Bolt

8



Wind Deflectors

Components: Flat Washer M8
Spring Washer M8
Hexagon Socket Head Bolt

9



Mudsill

Specification: L1350,L2700
Material: AL6005-T5(Anodized)

10



Splice for Mudsill

Material: AL6005-T5(Anodized)

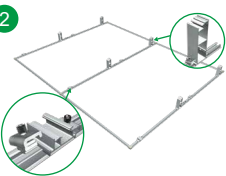
Installation Guide

1



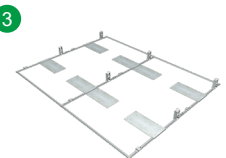
Place Mudsills as indicated in solution drawings.

2



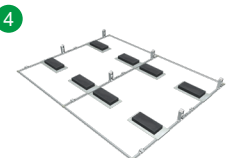
Fasten Front Supports and Back Supports on the Mudsills by C Clamp Kit.

3



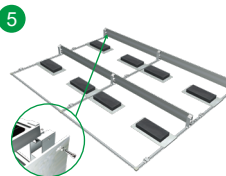
Fasten Ballasted Trays.

4



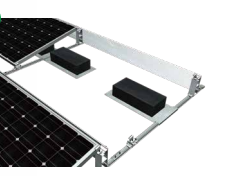
Put concrete on Blasted Tray.

5



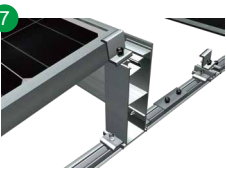
Fasten Wind Deflector with Back Support by Hexagon Socket Bolt Kit.

6



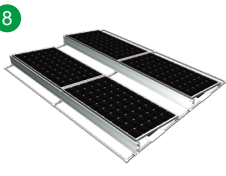
Fasten modules on the Front Supports and Back Supports.

7

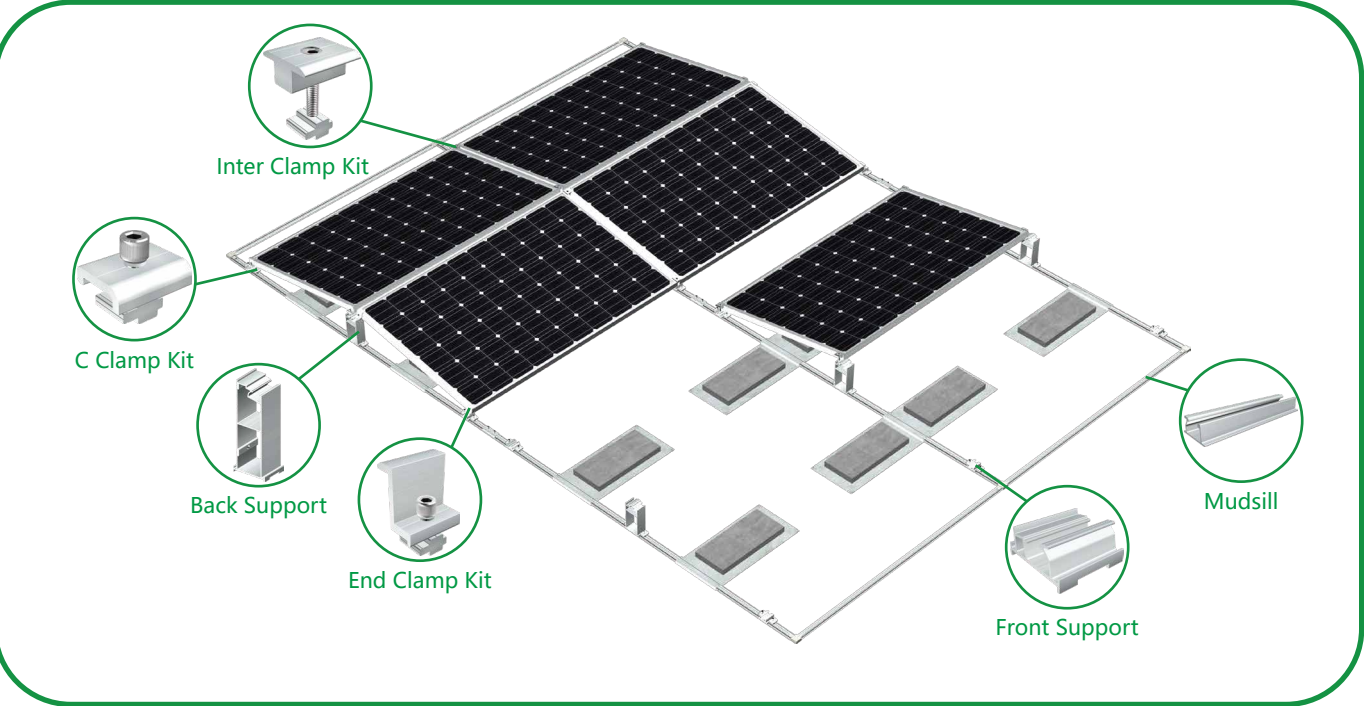


Fasten modules by Inner Clamp Kits.

8



Complete installation.



Technical Parameters

| | | | |
|-------------------------|---|------------------|---|
| System Name | MRac Roof Solar PV Mounting System Matrix I | Design Standard | AS/NZS 1170 、 DIN 1055 、 JIS C 8955: 2017 |
| Installation Site | Flat Roof ,Ground | | International Building Code: IBC 2009 |
| Foundation | Concrete Roof | | California Building Code: CBC 2010 |
| Tilt Angle | 5 ° , 10 ° | Material | AL6005-T5(Anodized) |
| Wind Load | 60m/s | Fastener | SUS304 &Zinc-Nickel Alloy Electroplated Steel |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5 (Anodized) |
| Applicable Solar Module | Framed | Color | Silver or Customized |
| Panel Layout | Landscape | Warranty | 10-Year Warranty |

Overview

MRac Roof Solar PV Mounting System Matrix I is a non-penetration solution for flat rooftop. The system achieves high wind resistance performance and fast onsite installation with concrete ballast and patented structure design.

Save Installation Time With Highly Pre-assembled Structure

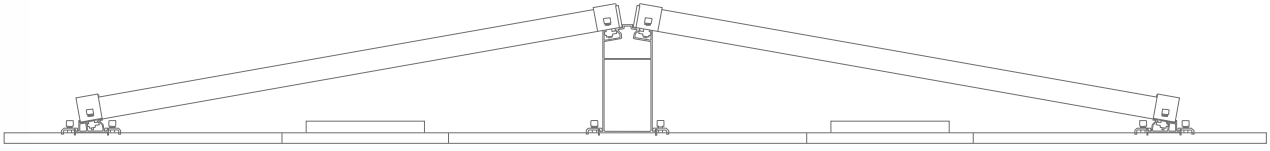
Customized design is available, flexible and multiple components can be chosen. Highly pre-assembled structure and no cutting or drilling on site save installation time and cost greatly.



Advantages

- > **High Durability Ensure the Structure Strength**
Professional structure design and high-density aluminum material ensure the stability and strength of the structure.
- > **Unique Matrix Design**
The matrix design further assures the stability of the whole system,and flexibly compatible with concrete block or ballast foundation.
- > **Reasonable Installation and Package Design**
Simplified components configuration lead to quicker installation and smaller package size, saving installation cost and freight.

Structure



Component Details

- 1

Front Support
Specification : L60
Material : AL6005-T5(Anodized)
- 2

Back Support
Specification : L60
Material : AL6005-T5(Anodized)
- 3

One - sided ballasted tedTray
Specification : 450*550
Material : Galvanized Sheet
- 4

Two-sided Ballasted Tray
Specification : 850*550
Material : Galvanized Sheet
- 5

End Clamp Kit
Components: End Clamp
Cross Module
Spring Washer M8
Hex Socket Head Bolt
- 6

Inter Clamp Kit
Components: Inter Clamp
Cross Module
Spring Washer M8
Hex Socket Head Bolt
- 7

C Clamp Kit
Components: C Clamp
Cross Module
Spring Washer M8
Hex Socket Head Bolt
- 8

Splice for Mudsill
Material : AL6005-T5(Anodized)
- 9

Mudsill
Specification : L1350,L2700
Material : AL6005-T5(Anodized)

Installation Guide

- 1

Place Mudsills as indicated in solution drawings.
- 2

Fasten Front Supports and Back Supports on the Mudsills by C Clamp Kit.
- 3

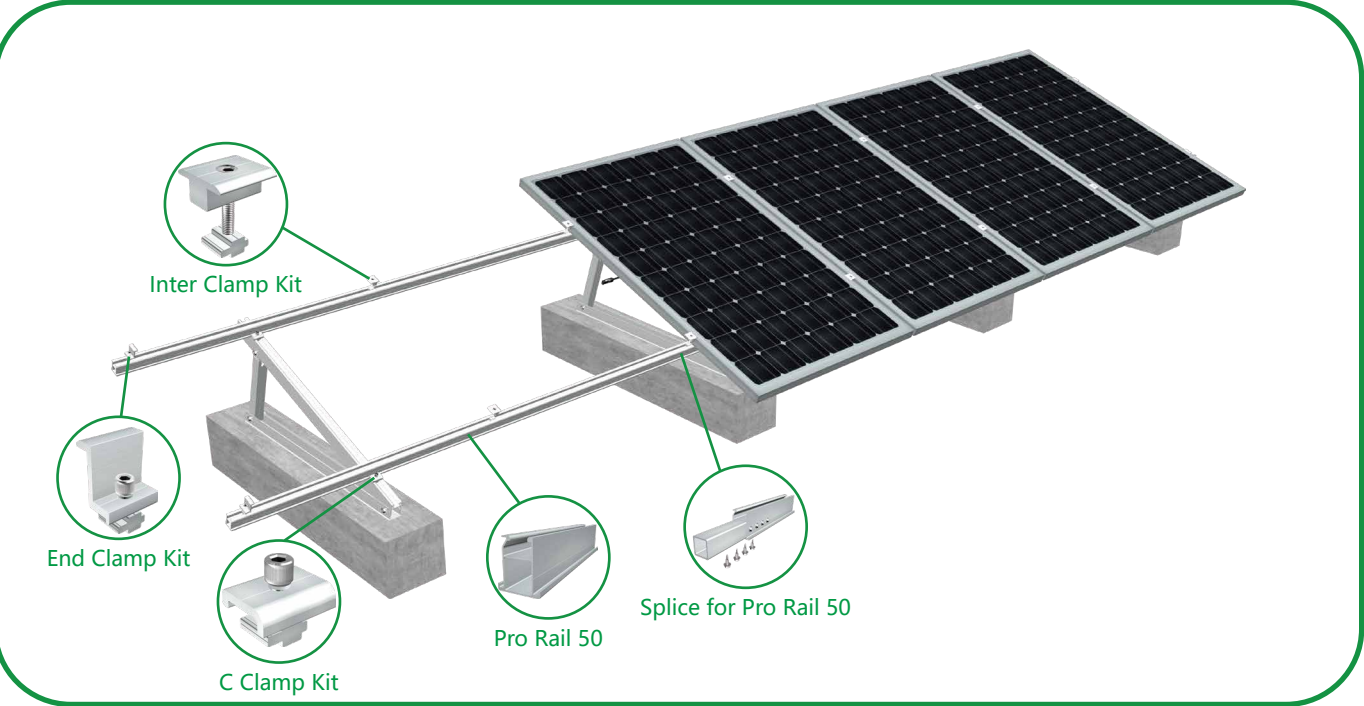
Fasten Ballasted Trays.
- 4

Put ballasts on Ballasted Tray.
- 5

Fasten modules on the Front Supports and Back Supports.
- 6

Fasten modules by Inner Clamp Kits.
- 7

Complete installation.



Technical Parameters

| | | | |
|-------------------------|---------------------------|------------------|---|
| System Name | MRac RMII | Design Standard | AS/NZS 1170 , DIN 1055 , JIS C 8955: 2017, |
| Installation Site | Flat Roof, Pitched Roof | | International Building Code IBC 2009 |
| Foundation | Concrete Roof, Metal Roof | | California Building Code CBC 2010 |
| Tilt Angle | 0-60° | Material | AL6005-T5(Anodized) |
| Wind Load | 60m/s | Fastener | SUS304 &Zinc-Nickel Alloy Electroplated Steel |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5(Anodized) |
| Applicable Solar Module | Framed or Frameless | Color | Silver or Customized |
| Panel Layout | Portrait or Landscape | Warranty | 10-Year Warranty |

Overview

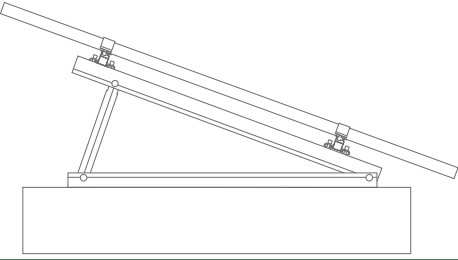
MRac Roof Solar PV Mounting System Matrix II is derived from RM I to meet different roof projects demands. Solar modules can be arranged with single or double rows of landscape or portrait orientation. Quick installation and stable structure are assured by the modular Patented design.



Advantages

- > **System Compatibility**
Components mostly pre-assembled in factory to assure quick and reliable installation on site. Suitable for different flat rooftop, and compatible to different types of solar modules.
- > **Unique Mudsill Design**
The mudsill can be fixed to flat roof or pitched roof with concrete foundation or steel foundation.
- > **Solar Module Layout Flexibility**
Both landscape and portrait solar module layout are suitable. Both single row and double rows layout can be achieved separately or combined.
- > **Adjustability**
Tilt angle can be adjustable

Structure



Component Details

- 1

Pro Rail 50
Specification : 3100、4100、5100mm
Material : AL6005-T5(Anodized)
- 2

Splice for Pro Rail 50
Specification : standard length 260mm
Flange Head Self-taping Screw ST6.3*19
Material : AL6005-T5(Anodized)
- 3

End Clamp Kit
Components: End Clamp
Cross Module
Spring Washer M8
Hex Socket Head Bolt
- 4

Inter Clamp Kit
Components: Inter Clamp
Cross Module
Spring Washer M8
Hex Socket Head Bolt
- 5

C Clamp Kit
Components: C Clamp
Cross Module
Spring Washer M8
Hex Socket Head Bolt
- 6

Angle Aluminum Tripod Support
Components: Angle Aluminum Beam
Angle Aluminum Mudsill
Angle Aluminum Side Beam
flat washerM8
spring washerM8
Hexagon Bolt M8*2.5
- 7

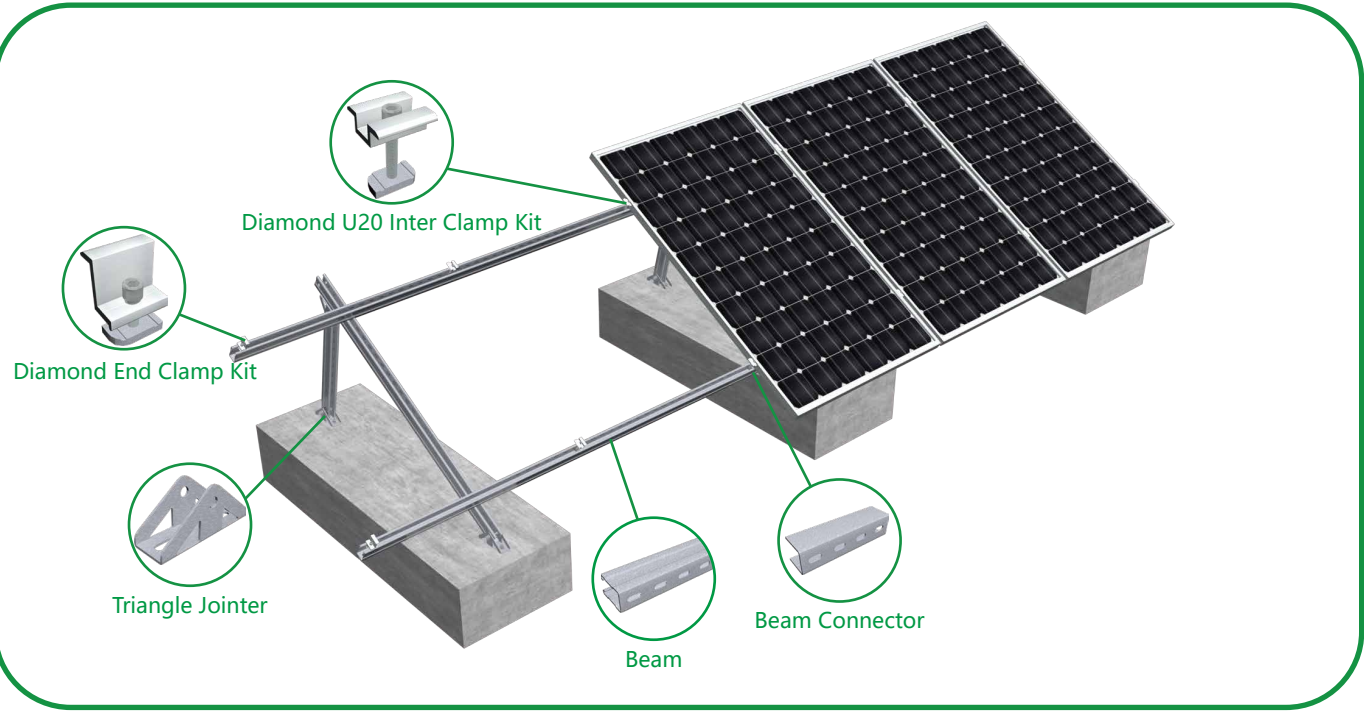
Single Tripod Support
Components: Tripod Support Beam
Tripod Support Mudsill
Tripod Support SquareTubeA
HJointer
Flat Washer M10
Spring Washer M10
Hexagon Bolt M10*65
- 8

Double Tripod Support
Components: Tripod Support Beam
Tripod Support Mudsill
Tripod Support Square Tube A/B
H Jointer
Flat Washer M10
Spring Washer M10
Hexagon Bolt M10*65
- 9

Adjustable Tripod
Components: Tripod Support Beam
Tripod Support Mudsill
Tripod Support Square Tube A
H Jointer
Flat Washer M10
Spring Washer M10
Hexagon Bolt M10*65

Installation Guide

- 1
- 2
- 3
- 4
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- 6
- 7
- 8



Technical Parameters

| | | | |
|-------------------------|-----------------------|------------------|---|
| System Name | MRac RMIII | Design Standard | AS/NZS 1170 , DIN 1055 , JIS C 8955: 2017, |
| Installation Site | Flat Roof, Open Land | | International Building Code IBC 2009 |
| Foundation | Concrete Foundation | | California Building Code CBC 2010 |
| Tilt Angle | 0-60° | Material | Q235B(Hot-dip galvanized) |
| Wind Load | 60m/s | Fastener | Zinc-Nickel Alloy Electroplated Steel & Q235B |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5(Anodized) |
| Applicable Solar Module | Framed or Frameless | Color | Silver or Customized |
| Panel Layout | Portrait or Landscape | Warranty | 10-Year Warranty |

Overview

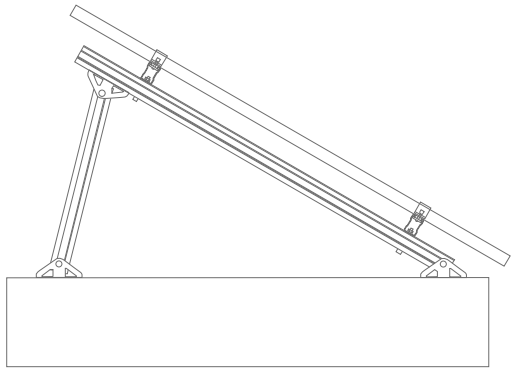
MRac Roof Solar PV Mounting System Matrix III is applied to various kinds of flat roof projects. Main components are made of hot-dip galvanized steel, with good performance of structure strength, stability and anti-corrosion, compatible with varied solar modules. Patented structure design guarantee quick installation to save construction cost.



Advantages

- > **System Compatibility**
Components mostly pre-assembled in factory to assure quick and reliable installation on site. Suitable for different flat rooftop, and compatible to different types of solar modules.
- > **Cost Efficiency**
Hot-dip galvanized steel assures the structure strength and lower cost for large-scale installation

Structure



Component Details

- 1

Beam
Specification : 3100、4100、5100mm
Material : Q235B(Hot-dip galvanized)
- 2

Beam Connector
Specification : L200
Material : Q235B(Hot-dip galvanized)
- 3

Diamond End Clamp Kit
Components: End Clamp
Rhombus Nut M8
Spring Washer M8
Hex Socket Head Bolt
- 4

Diamond U20 Inter Clamp Kit
Components: Inter Clamp
Rhombus Nut M8
Spring Washer M8
Hex Socket Head Bolt
- 5

Inclined Support
Material : Q235B(Hot-dip galvanized)
- 6

Back Support
Material : Q235B(Hot-dip galvanized)
- 7

Triangle Jointer
Specification : L150
Material : Q235B(Hot-dip galvanized)

Installation Guide

- 1

Make concrete bases with embedded bolts according to the solution drawing.
- 2

Fasten the plate on the concrete base.
- 3

Connect Back Support,Front Support and Inclined Support with the base.
- 4

Front&Back Support and Inclined Support installation has been completed.
- 5

Fasten the rail on Inclined Support.
- 6

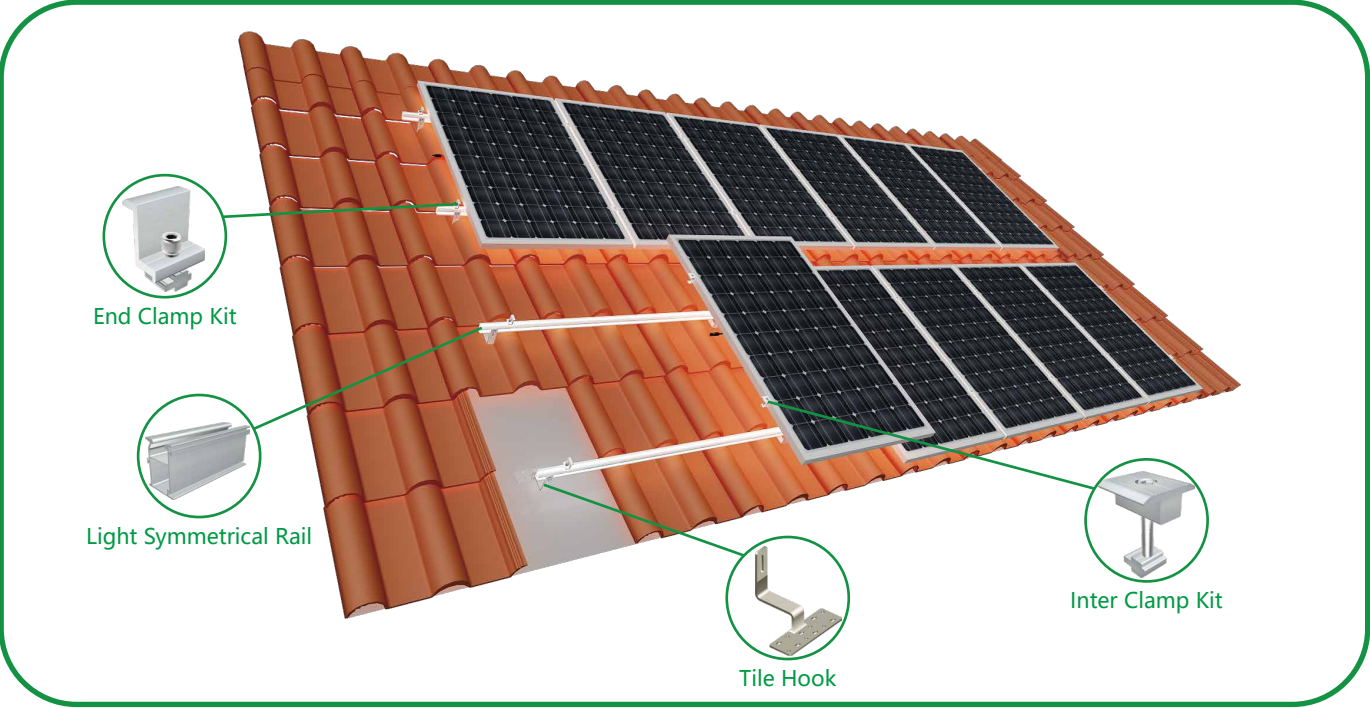
Install the Beam Connector.
- 7

Beam installation finished.
- 8

Fasten the solar modules by end clamp kits and inner clamp kits.
- Complete installation.

MRac[®]

MRac Tile Roof Hook Solar PV Mounting System



Technical Parameters

| | | | |
|-------------------------|---|------------------|--|
| System Name | MRac Tile Hook | Design Standard | AS/NZS 1170、DIN 1055、JIS C8955：2017 |
| Installation Site | Pitched Roof | | International Building Code：IBC 2009 |
| Foundation | Tile, Flat Tile, Slate Tile, Asphalt Shingle Tile | | California Building Code：CBC 2010 |
| Tilt Angle | 5-45° | Hook Material | SUS304 & Zinc-Nickel Alloy Electroplated Steel |
| Wind Load | 60m/s | Fastener | SUS304 & Zinc-Nickel Alloy Electroplated Steel |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5(Anodized) |
| Applicable Solar Module | Framed or Frameless | Color | Silver or Customized Color |
| Panel Layout | Portrait or Landscape | Warranty | 10-year warranty |

Overview

MRac Tile Roof Hook Solar PV Mounting System is applied to tile roof residential and commercial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular Patented design. Pre-assembled kits save the installation time and cost onsite.



Advantages

- > **Applicable for Different Tile Roofs**
Design project by project, selecting configuration of mounting system components flexibly.
- > **Save Installation Time and Cost**
Pre-assembled components and clear installation manuals are supplied to save the onsite installation time and cost, lead to better Rol.
- > **Compatible to Different Types of Solar Modules**
Compatible to most kinds of framed 60-cell, 72-cell, half-cut cells modules and frameless modules.

Components



Tile Hook 1



End Clamp Kit



Inter Clamp Kit



hook Rail



Pro Standard Rail(optional)

Optional Hook Type



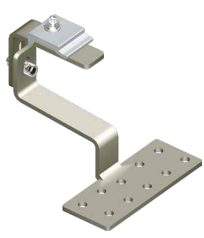
Tile Hook 1



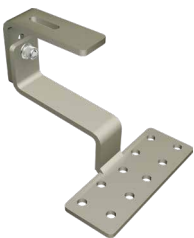
Adjustable Tile Hook 1



Tile Hook 3



Tile Hook H117



Tile Hook H120



Tile Hook H132



Tile Hook H145



Asphalt Shingle Hook H75



Flat Tile Hook H107



Flat Tile Hook H125

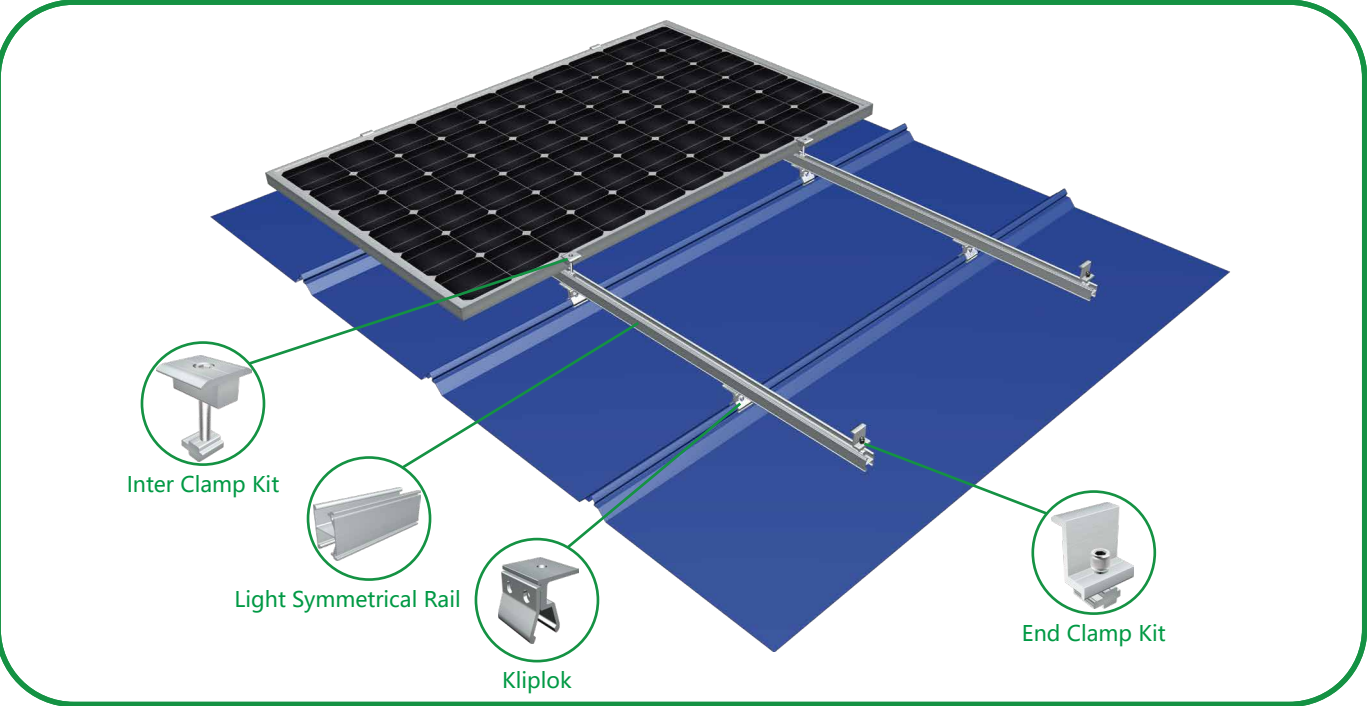


Flat Tile Hook H132



Slate Hook H60

MRac® MRac Kliplok

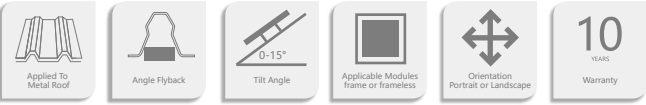


Technical Parameters

| | | | |
|-------------------------|--------------------------------|------------------|--|
| System Name | MRac Kliplok | Design Standard | AS/NZS 1170, DIN 1055, JIS C8955: 2017, |
| Installation Site | Pitched Roof | | International Building Code IBC 2009, |
| Foundation | Trapezoidal Metal Roof Support | | California Building Code CBC 2010; |
| Tilt Angle | 0-15° | Material | AL6005-T5(Anodized) |
| Wind Load | 60m/s | Fastener | SUS304 & Zinc-Nickel Alloy Electroplated Steel |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5(Anodized) |
| Applicable Solar Module | Framed or Frameless | Color | Silver or Customized |
| Panel Layout | Portrait or Landscape | Warranty | 10 Years |

Overview

MRac Kliplok is mainly applied to Kliplok, and its material is Al6005-T5. With its professional design, it can realize the perfect connection between roof support and roof to meet customer installation requirement. Professional solution and structure design can save your installation time and cost. Moreover, Patented and unique design can bring you a good installation experience.



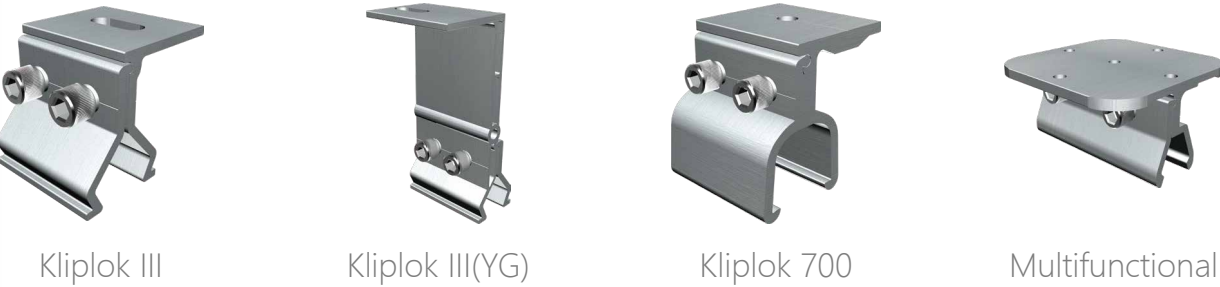
Advantages

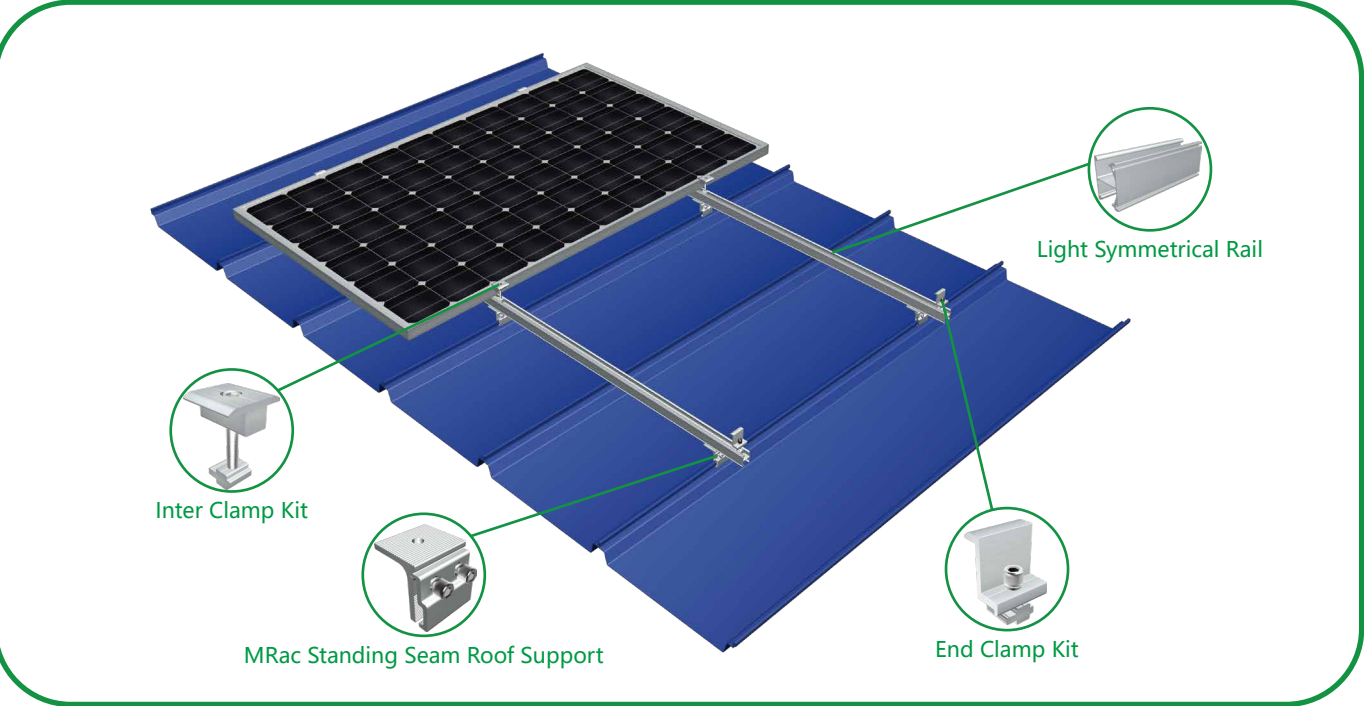
- > **Applicable for different metal roofs**
According to customer requirement, choose different roof mounting system flexibly;
- > **Save installation time and cost**
Save the installation time and cost by offering installation manual and solution;
- > **Compatible to different types of solar modules**
Free and flexible to choose different types of solar modules.

Components



Applicable Standing Seam Support





Technical Parameters

| | | | |
|-------------------------|---------------------------------|------------------|---|
| System Name | MRac Standing Seam Roof Support | Design Standard | AS/NZS 1170、DIN 1055、JIS C8955: 2017 |
| Installation Site | Pitched Roof | | International Building Code: IBC 2009 |
| Foundation | Trapezoidal Metal Roof Support | | California Building Code: CBC 2010 |
| Tilt Angle | 0-15° | Material | AL6005-T5(Anodized) |
| Wind Load | 60m/s | Fastener | Q235B(Hot-Dip Galvanized) & A16005-T5(Anodized) |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5(Anodized) |
| Applicable Solar Module | Framed or Frameless | Color | Silver or Customized |
| Panel Layout | Portrait or Landscape | Warranty | 10 Years |

Overview

MRac Standing Seam Metal Roof Solar PV Mounting System is applied to Standing Seam Metal Sheet Roof commercial and industrial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular Patented design. Pre-assembled kits save the installation time and cost onsite.



Advantages

- > **Applicable for Different Metal Roofs**
Design project by project, selecting configuration of mounting system components flexibly.
- > **Save Installation Time and Cost**
Pre-assembled components and clear installation manuals are supplied to save the onsite installation time and cost, lead to better RoI.
- > **Compatible to Different Types of Solar Modules**
Compatible to most kinds of framed 60-cell, 72-cell, half-cut cells modules and frameless modules.

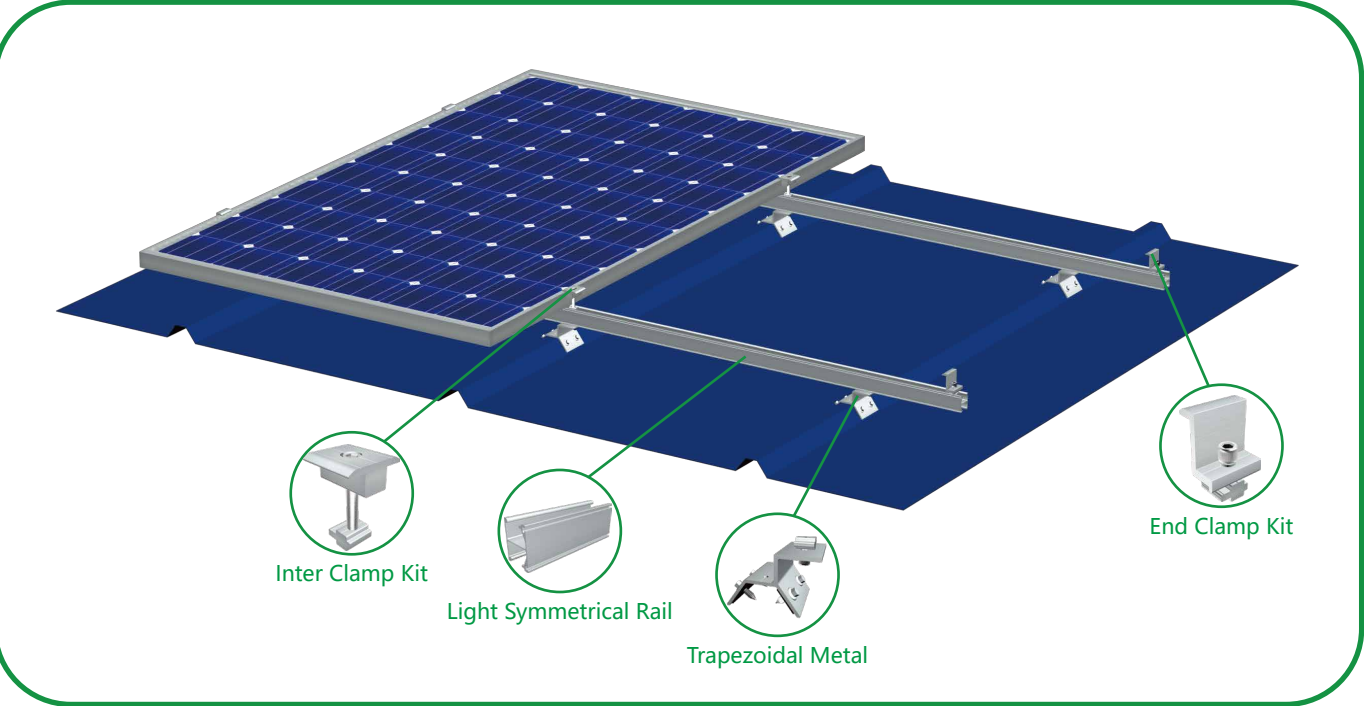
Components



Applicable Standing Seam Support



MRac® Trapezoidal Metal



Technical Parameters

| | | | |
|-------------------------|--------------------------------|------------------|--|
| System Name | MRac Trapezoidal Metal | Design Standard | AS/NZS 1170, DIN 1055, JIS C8955: 2017, |
| Installation Site | Pitched Roof | | International Building Code IBC 2009, |
| Foundation | Trapezoidal Metal Roof Support | | California Building Code CBC 2010; |
| Tilt Angle | 0-15° | Material | AL6005-T5(Anodized) |
| Wind Load | 60m/s | Fastener | SUS304&Zinc-Nickel Alloy Electroplated Steel |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5(Anodized) |
| Applicable Solar Module | Framed or Frameless | Color | Silver or Customized |
| Panel Layout | Portrait or Landscape | Warranty | 10-Year Warranty |

Overview

MRac Trapezoidal Metal Roof Clamp Solar PV Mounting System is mainly applied to metal roof, and its main material is aluminium alloy. With its professional design, it can realize the perfect connection between klipkoks and roof to meet customer installation requirement. Professional solution and structure design can save your installation time and cost. Moreover, Patented and unique design can bring you a good and fast installation experience.



Advantages

- > **Applicable for different metal roofs**
According to different metal roof types, making professionally design and achieve perfectly connection between the klipkoks and roof tiles.
- > **Save installation time and cost**
Patented structure design and system solutions will reduce on-site installation time and cost.
- > **Compatible to different types of solar modules**
By its independent researched clamps, it is compatible to various solar modules in the market.
- > **Excellent structure design**
Professional structure design will meet components installation requirements of tiled or with angle, as well as the installation in landscape and portrait orientation.

Components

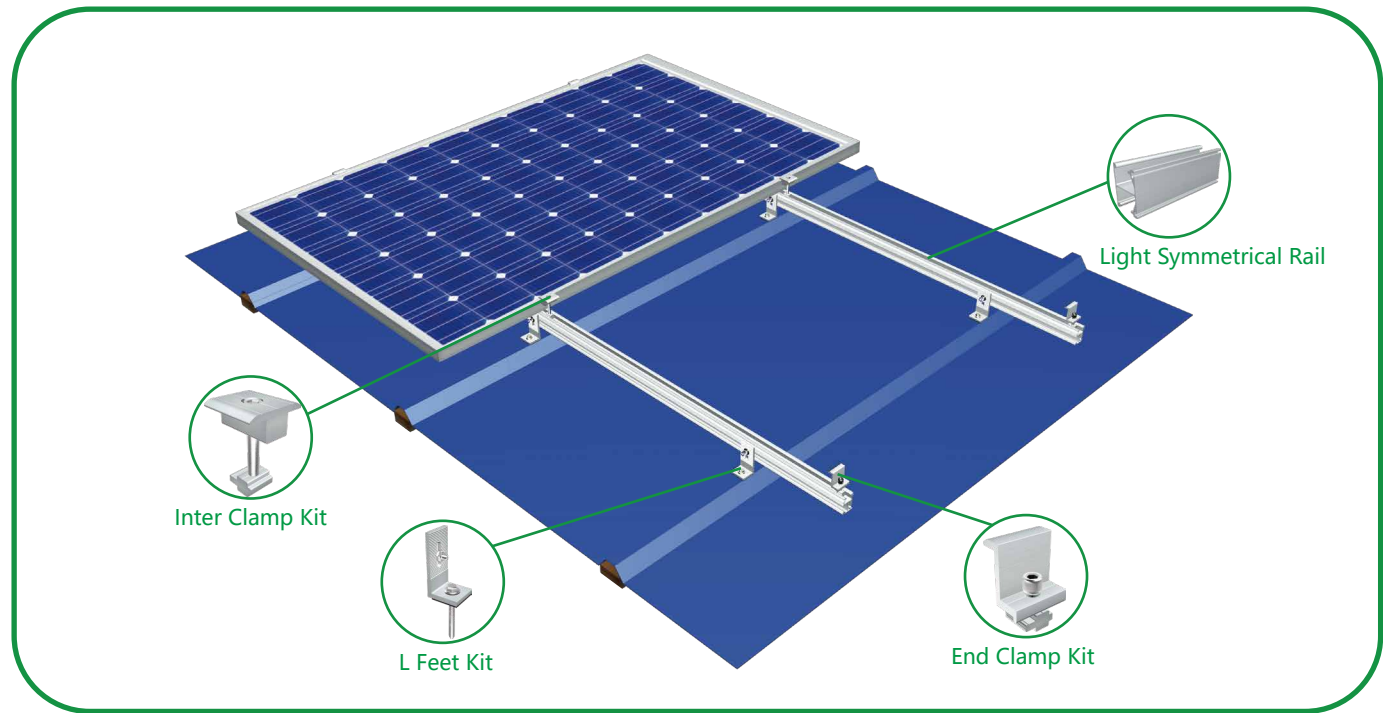


Applicable Standing Seam Support

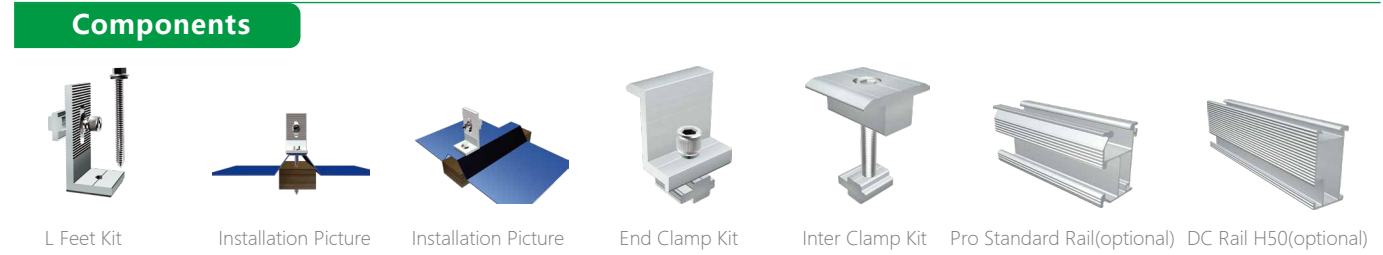


MRac[®]

MRac L Feet and Hanger Bolt Kit Metal Roof PV Mounting System

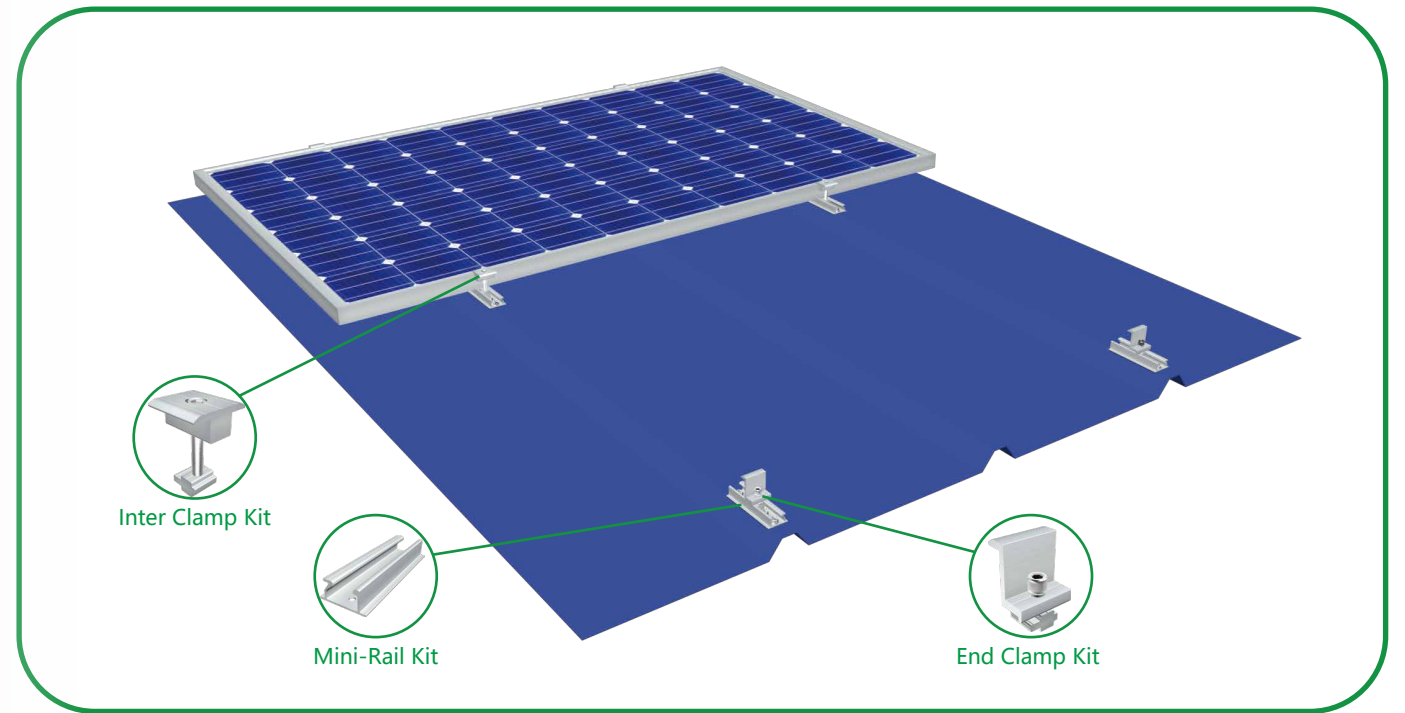


| Technical Parameters | | | |
|-------------------------|-----------------------------------|------------------|--|
| System Name | MRac L Feet Kit & Hanger Bolt Kit | Design Standard | AS/NZS 1170、DIN 1055、JIS C8955: 2017 |
| Installation Site | Pitched Roof | | International Building Code: IBC 2009 |
| Foundation | Trapezoidal Roof | | California Building Code: CBC 2010 |
| Tilt Angle | 0° | Material | AL6005-T5(Anodized) |
| Wind Load | 60m/s | Fastener | SUS304 & Zinc-Nickel Alloy Electroplated Steel |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5(Anodized) |
| Applicable Solar Module | Framed or Frameless | Color | Silver or Customized |
| Panel Layout | Portrait or Landscape | Warranty | 10-Year Warranty |



MRac[®]

MRac Mini-Rail Kit Metal Roof PV Mounting System



| Technical Parameters | | | |
|-------------------------|-----------------------|------------------|--|
| System Name | Mini-Rail Kit | Design Standard | AS/NZS 1170、DIN 1055、JIS C8955: 2017 |
| Installation Site | Pitched Roof | | International Building Code: IBC 2009 |
| Foundation | Trapezoidal Roof | | California Building Code: CBC 2010 |
| Tilt Angle | 0° | Material | Q235B(Hot-Dip Galvanized) &AL6005-T5(Anodized) |
| Wind Load | 60m/s | Fastener | SUS304 & Zinc-Nickel Alloy Electroplated Steel |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5(Anodized) |
| Applicable Solar Module | Framed or Frameless | Color | Silver or Customized |
| Panel Layout | Portrait or Landscape | Warranty | 10-Year Warranty |

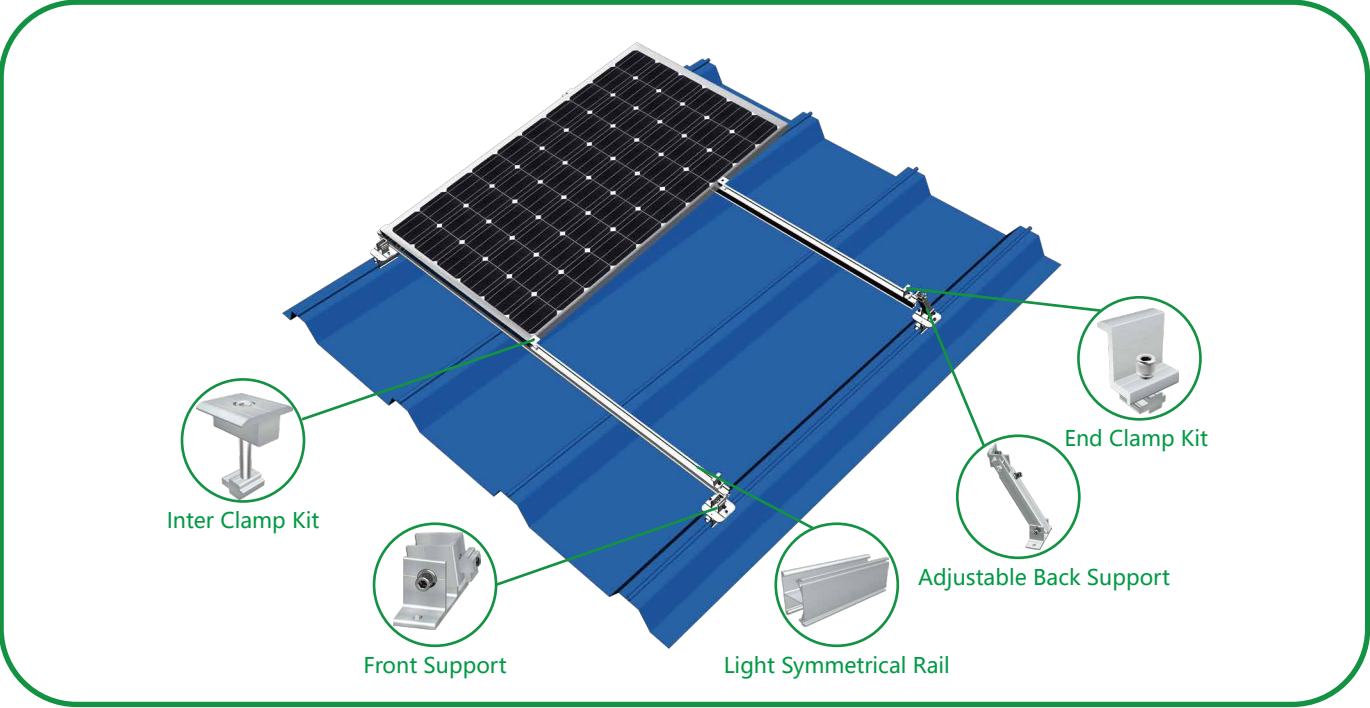
Overview

MRac Mini-Rail Kit is mainly applied to Trapezoidal Metal Roof in commercial and industrial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular Patented design. Pre-assembled kits save the installation time and cost onsite.



MRac[®]

MRac Adjustable Support Kit Solar PV Mounting System



Technical Parameters

| | | | |
|-------------------------|-----------------------|------------------|--|
| System Name | Adjustable Support | Design Standard | AS/NZS 1170、DIN 1055、JIS C8955：2017 |
| Installation Site | Pitched Roof | | International Building Code：IBC 2009 |
| Foundation | Metal Roof | | California Building Code：CBC 2010 |
| Tilt Angle | 10-60° | Material | AL6005-T5(Anodized) |
| Wind Load | 60m/s | Fastener | SUS304 & Zinc-Nickel Alloy Electroplated Steel |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5(Anodized) |
| Applicable Solar Module | Framed or Frameless | Color | Silver or Customized |
| Panel Layout | Landscape or Portrait | Warranty | 10-Year Warranty |

Overview

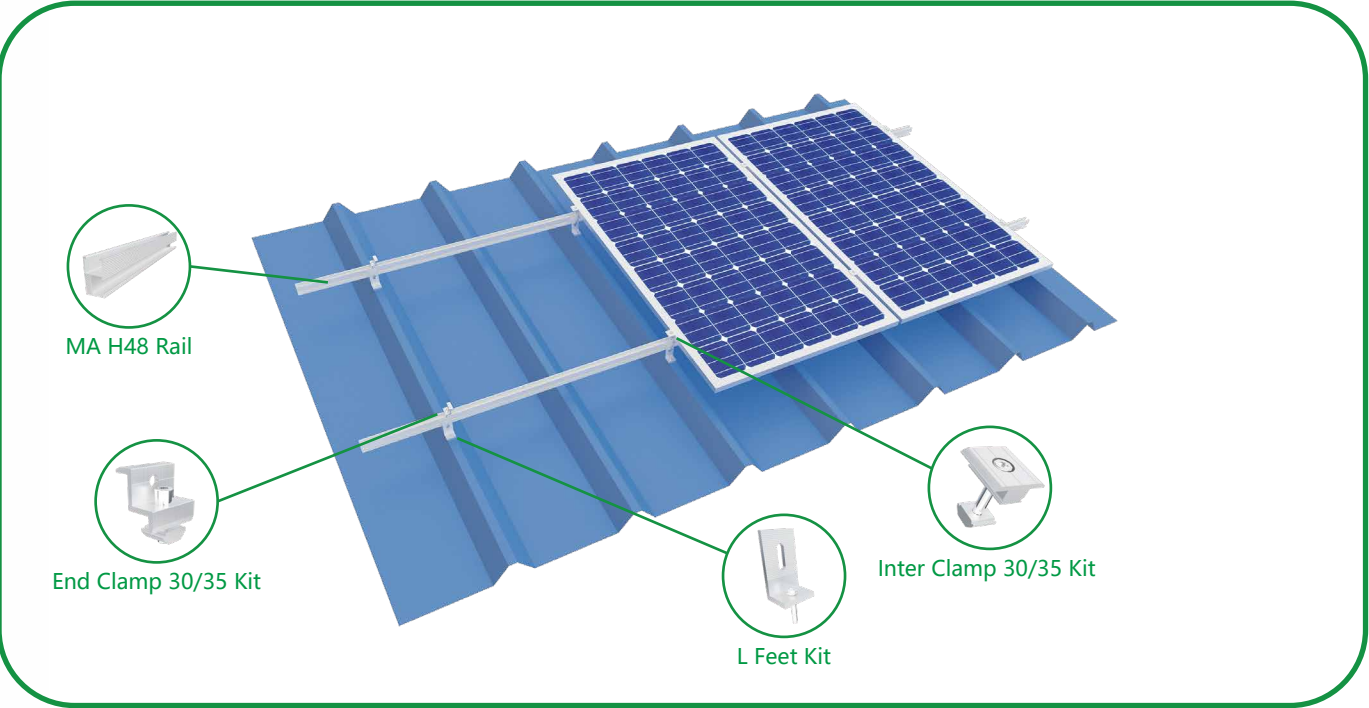
MRac Adjustable Support Kit Solar PV Mounting System are applied in most Corrugated Metal Roof and Flat Roof in commercial and industrial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular Patented design. Adjustable angles can reduce the stock SKU and flexible for onsite installation. Pre-assembled kits save the installation time and cost onsite.

Components



MRac[®]

MRac L Feet and MA H48 Rail Mounting System



Technical Parameters

| | | | |
|-------------------------|---|------------------|--|
| System Name | MRac L Feet and MA H48 Rail Mounting System | Design Standard | AS/NZS 1170、DIN 1055、JIS C8955：2017 |
| Installation Site | Pitched Roof | | International Building Code：IBC 2009 |
| Foundation | Trapezoidal Roof | | California Building Code：CBC 2010 |
| Tilt Angle | 0-15° | Material | AL6005-T5(Anodized) |
| Wind Load | 60m/s | Fastener | SUS304 & Zinc-Nickel Alloy Electroplated Steel |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5(Anodized) |
| Applicable Solar Module | Framed or Frameless | Color | Silver or Customized |
| Panel Layout | Landscape or Portrait | Warranty | 10-Year Warranty |

Overview

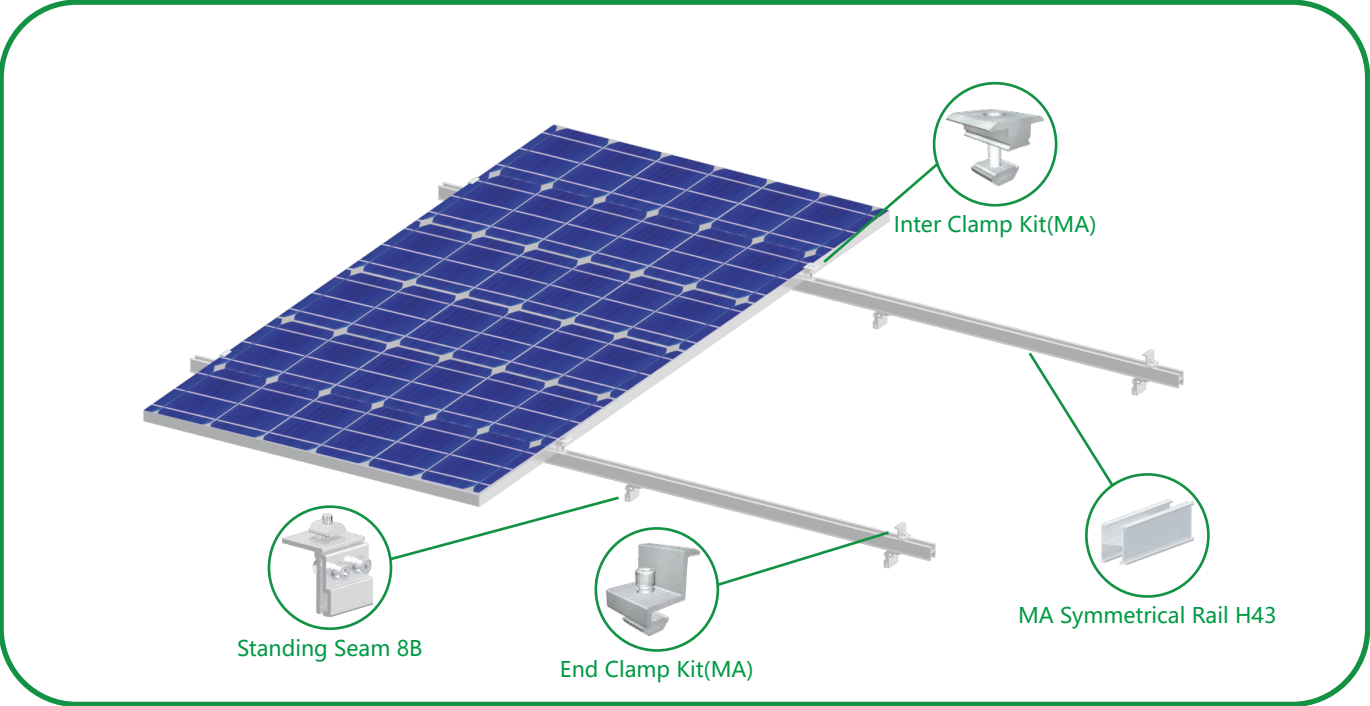
MRac L Feet and MA H48 Rail Mounting System are applied in most corrugated metal roof commercial and industrial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular patented design. Pre-assembled kits save the installation time and cost on site.

Components



MRac[®]

MRac Standing Seam 8B Solar PV Mounting System



Technical Parameters

| | | | |
|-------------------------|--|------------------|---|
| System Name | MRac Standing Seam 8B Solar PV Mounting System | Design Standard | AS/NZS 1170、DIN 1055、JIS C8955：2017 |
| Installation Site | Pitched Roof | | International Building Code：IBC 2009 |
| Foundation | Trapezoidal Metal Roof Support | | California Building Code：CBC 2010 |
| Tilt Angle | 0° | Material | Q235B(Hot-Dip Galvanized) & AL6005-T5(Anodized) |
| Wind Load | 60m/s | Fastener | SUS304&Zinc-Nickel Alloy Electroplated Steel |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5(Anodized) |
| Applicable Solar Module | Framed or Frameless | Color | Silver or Customized |
| Panel Layout | Landscape or Portrait | Warranty | 10-Year Warranty |

Overview

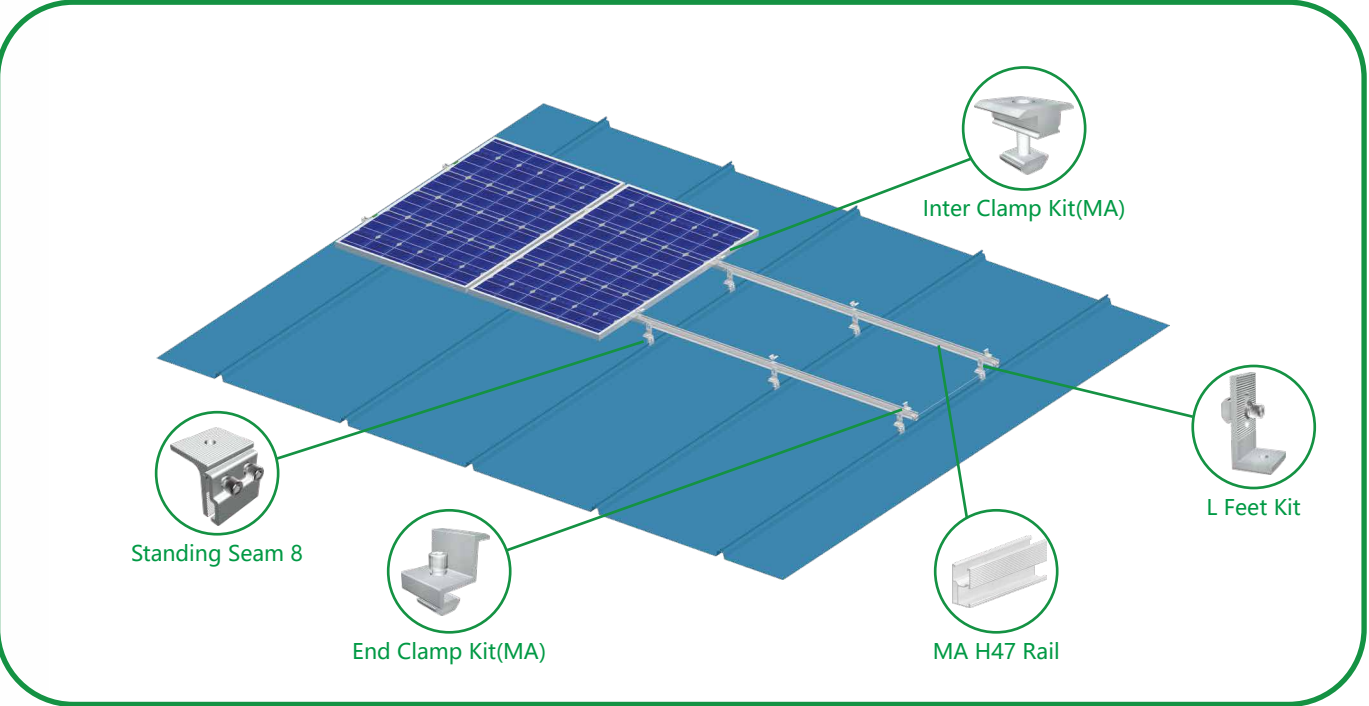
MRac Standing Seam 8 Solar PV Mounting System is applied to Standing Seam Metal Sheet Roof commercial and industrial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular Patented design. Pre-assembled kits save the installation time and cost onsite.

Components



MRac[®]

MRac Standing Seam 8 Solar PV Mounting System



Technical Parameters

| | | | |
|-------------------------|---|------------------|---|
| System Name | MRac Standing Seam 8 Solar PV Mounting System | Design Standard | AS/NZS 1170、DIN 1055、JIS C8955：2017 |
| Installation Site | Pitched Roof | | International Building Code：IBC 2009 |
| Foundation | Trapezoidal Metal Roof Support | | California Building Code：CBC 2010 |
| Tilt Angle | 0-15° | Material | Q235B(Hot-Dip Galvanized) & AL6005-T5(Anodized) |
| Wind Load | 60m/s | Fastener | SUS304&Zinc-Nickel Alloy Electroplated Steel |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5(Anodized) |
| Applicable Solar Module | Framed or Frameless | Color | Silver or Customized |
| Panel Layout | Landscape or Portrait | Warranty | 10-Year Warranty |

Overview

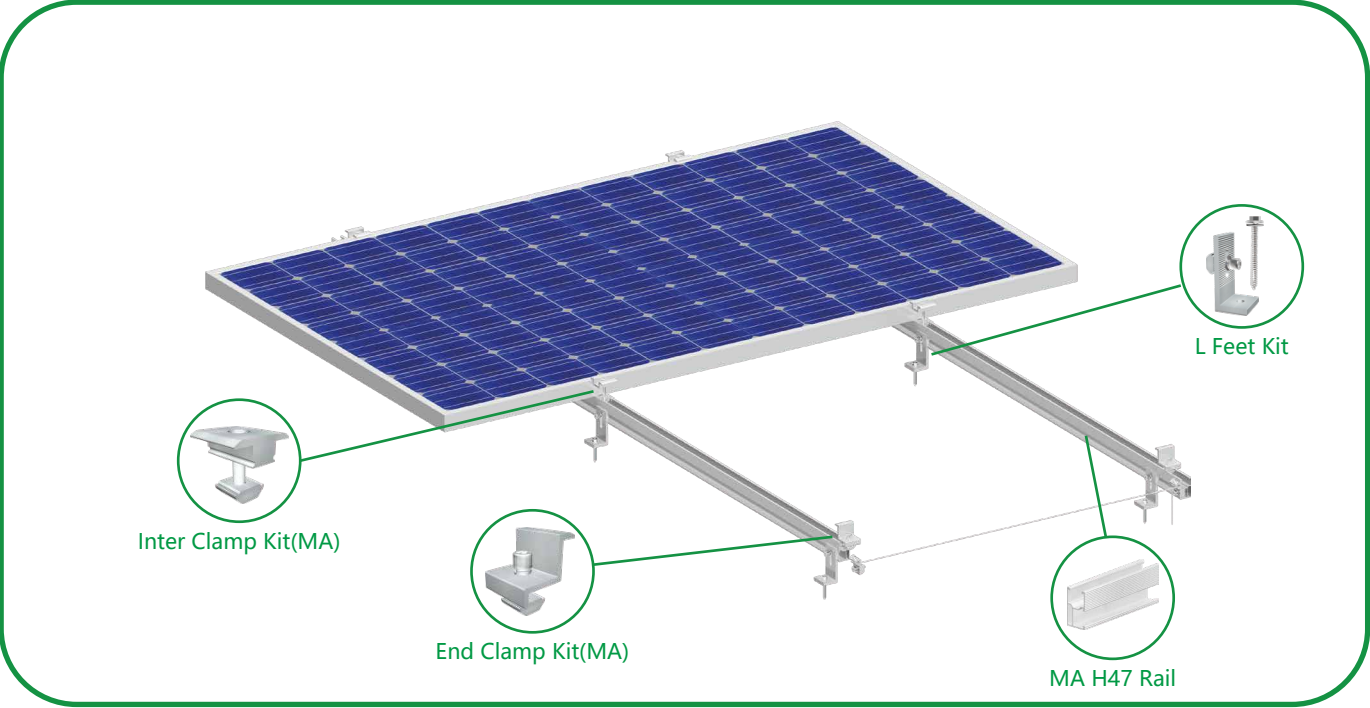
MRac Standing Seam 8 Solar PV Mounting System is applied to Standing Seam Metal Sheet Roof commercial and industrial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular Patented design. Pre-assembled kits save the installation time and cost onsite.

Components



MRac[®]

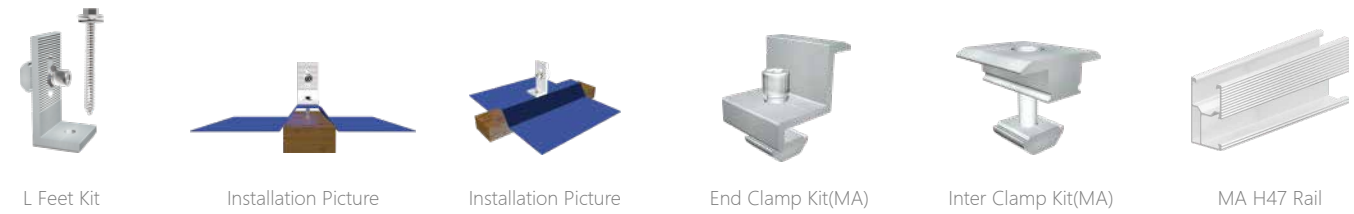
MRac L Feet and Hanger Bolt Kit Metal Roof PV Mounting System



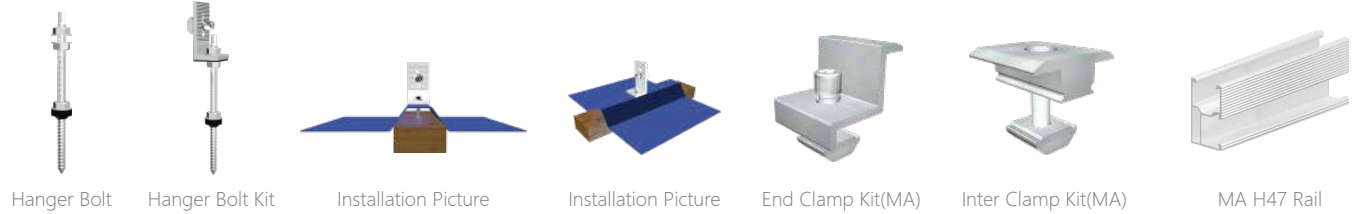
Technical Parameters

| | | | |
|-------------------------|---|------------------|--|
| System Name | MRac L Feet and Hanger Bolt Kit Metal Roof PV Mounting System | Design Standard | AS/NZS 1170、DIN 1055、JIS C8955：2017 |
| Installation Site | Pitched Roof | | International Building Code：IBC 2009 |
| Foundation | Trapezoidal Roof | | California Building Code：CBC 2010 |
| Tilt Angle | 0° | Material | AL6005-T5(Anodized) |
| Wind Load | 60m/s | Fastener | SUS304 & Zinc-Nickel Alloy Electroplated Steel |
| Snow Load | 1.6KN/m ² | Small Components | AL6005-T5(Anodized) |
| Applicable Solar Module | Framed or Frameless | Color | Silver or Customized |
| Panel Layout | Landscape or Portrait | Warranty | 10-Year Warranty |

Components



Components



MRac[®]

MRac Universal Products— Beams, Rails

Pro Standard Rail



| | |
|-----------------|---------------------|
| Product Name | Pro Standard Rail |
| Specification | L*46.8*34.2 |
| Standard Length | 3100, 4100, 5100mm |
| Material | AL6005-T5(Anodized) |
| Package | 300pcs/pallet |

Light Symmetrical Rail

| | |
|-----------------|---|
| Product Name | Light Symmetrical Rail |
| Specification | L*39*30 |
| Standard Length | 3100, 4100, 5100mm |
| Material | AL6005-T5(Anodized) |
| Package | L≤4.1mm,600pcs/pallet; L≥4.1mm, 408pcs/pallet |



Hook Rail



| | |
|-----------------|---------------------|
| Product Name | Hook Rail |
| Specification | L*46.8*37 |
| Standard Length | 3100, 4100, 5100mm |
| material | AL6005-T5(Anodized) |
| Package | 280pcs/pallet |

Pro Rail 50

| | |
|-----------------|---------------------|
| Product Name | Pro Rail 50 |
| Specification | |
| Standard Length | 3100, 4100, 5100mm |
| Material | AL6005-T5(Anodized) |
| Package | |



Conical symmetric Rail 87



| | |
|-----------------|---------------------------|
| Product Name | Conical symmetric Rail 87 |
| Specification | L* 5 8 * 8 7 |
| Standard Length | 3100, 4100, 5100mm |
| Material | AL6005-T5(Anodized) |
| Package | |

Rail 85

| | |
|-----------------|---------------------|
| Product Name | Rail 85 |
| Specification | L*63.5*85 |
| Standard Length | 3100, 4100, 5100mm |
| Material | AL6005-T5(Anodized) |
| Package | 180pcs/pallet |



Conical symmetric Rail 92



| | |
|-----------------|---------------------------|
| Product Name | Conical symmetric Rail 92 |
| Specification | L* 5 8 * 9 2 |
| Standard Length | 3100, 4100, 5100mm |
| Material | AL6005-T5(Anodized) |
| Package | |

Rail105

| | |
|-----------------|---------------------|
| Product Name | Rail 105 |
| Specification | L*64.5*45 |
| Standard Length | 3100, 4100, 5100mm |
| Material | AL6005-T5(Anodized) |
| Package | 144pcs/pallet |



Rail T115



| | |
|-----------------|---------------------|
| Product Name | Rail 115 |
| Specification | L*71*115 |
| Standard Length | 3100, 4100, 5100mm |
| Material | AL6005-T5(Anodized) |
| Package | 112pcs/pallet |

Beams 85

| | |
|-----------------|---------------------|
| Product Name | Beams 85 |
| Specification | L*71*85 |
| Standard Length | 3100, 4100, 5100mm |
| Material | AL6005-T5(Anodized) |
| Package | 162pcs/pallet |



Beams 95



| | |
|-----------------|---------------------|
| Product Name | Beams 95 |
| Specification | L*71*95 |
| Standard Length | 3100, 4100, 5100mm |
| Material | AL6005-T5(Anodized) |
| Package | 128pcs/pallet |

Beams 105

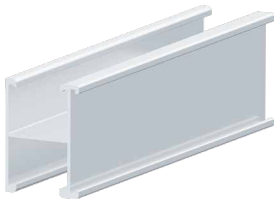
| | |
|-----------------|---------------------|
| Product Name | Beams 105 |
| Specification | L*71*105 |
| Standard Length | 3100, 4100, 5100mm |
| Material | AL6005-T5(Anodized) |
| Package | 112pcs/pallet |





MRac Universal Products— Beams, Rails

MA Rail H43



| | |
|---------------|---------------------|
| Product Name | MA Rail H43 |
| Specification | L2400 |
| Material | AL6005-T5(Anodized) |
| Package | |

| | |
|---------------|---------------------|
| Product Name | MA Rail H47 |
| Specification | L2400 |
| Material | AL6005-T5(Anodized) |
| Package | |

MA Rail H47



MA Rail H48



| | |
|---------------|---------------------|
| Product Name | MA Rail H48 |
| Specification | L4700 |
| Material | AL6005-T5(Anodized) |
| Package | |

| | |
|---------------|---------------------|
| Product Name | MA Rail H48(Black) |
| Specification | L4700 |
| Material | AL6005-T5(Anodized) |
| Package | |

MA Rail H48(Black)



MRac Universal Products— Beams, Rails

MA Rail



| | |
|-----------------|---------------------|
| Product Name | MA Rail |
| Specification | L27.9*52 |
| Standard Length | 3100, 4100, 5100mm |
| Material | AL6005-T5(Anodized) |
| Package | |

| | |
|-----------------|---------------------|
| Product Name | MC Rail |
| Specification | L28.9*53 |
| Standard Length | 3100, 4100, 5100mm |
| Material | AL6005-T5(Anodized) |
| Package | |

MC Rail



MRac[®]

Universal Product-Connectors

Splice for Pro Standard Rail and Hook Rail



| | |
|---------------|--|
| Product Name | Splice for Pro Standard Rail and Hook Rail |
| Specification | L100 |
| Material | AL6005-T5(Anodized) |
| Accessory | Hexagon Socket Head Bolt M8*12 |
| Package | 96pcs/small carton, 384pcs/big carton |

Splice for Light Symmetrical Rail

| | |
|---------------|---------------------------------------|
| Product Name | Splice for Light Symmetrical Rail |
| Specification | L100 |
| Material | AL6005-T5(Anodized) |
| Accessory | Hexagon Socket Head Bolt M8*12 |
| Package | 96pcs/small carton, 384pcs/big carton |



Splice for pro Rail 50



| | |
|---------------|-----------------------------|
| Product Name | Splice for pro Rail 50 |
| Specification | L100 |
| Material | AL6005-T5(Anodized) |
| Accessory | Self-Tapping Screw ST6.3*19 |
| Package | |

Splice for Conical Symmetrical Rail 87

| | |
|---------------|--|
| Product Name | Splice for Conical Symmetrical Rail 87 |
| Specification | L260 |
| Material | AL6005-T5(Anodized) |
| Accessory | Self-Tapping Screw ST6.3*19 |
| Package | |



MRac[®]

Universal Product-Connectors

Splice for Beam 85



| | |
|---------------|---|
| Product Name | Splice for Beam 85 |
| Specification | L260/L500 |
| Material | AL6005-T5(Anodized) |
| Accessory | Self-Tapping Screw ST6.3*19 |
| Package | L260: 27pcs/big carton; L500: 27Pcs/long carton |

Splice for conical symmetric Beam 92

| | |
|---------------|--------------------------------------|
| Product Name | Splice for conical symmetric Beam 92 |
| Specification | L260/L500 |
| Material | AL6005-T5(Anodized) |
| Accessory | Self-Tapping Screw ST6.3*19 |
| Package | |



Splice for Rail 105



| | |
|---------------|---|
| Product Name | Splice for Rail 105 |
| Specification | L260/L500 |
| Material | AL6005-T5(Anodized) |
| Accessory | Self-Tapping Screw ST6.3*19 |
| Package | L260: 27pcs/big carton; L500: 27Pcs/long carton |

Splice for Rail 115

| | |
|---------------|---|
| Product Name | Splice for Rail 115 |
| Specification | L260/L500 |
| Material | AL6005-T5(Anodized) |
| Accessory | Self-Tapping Screw ST6.3*19 |
| Package | L260: 19pcs/big carton; L500: 17Pcs/long carton |



MRac® Universal Product-Connectors

Splice for Beam 85



| | |
|---------------|---|
| Product Name | Splice for Beam 85 |
| Specification | L260/L500 |
| Material | AL6005-T5(Anodized) |
| Accessory | Self-Tapping Screw ST6.3*19 |
| Package | L260: 24pcs/big carton; L500: 24Pcs/long carton |

| | |
|---------------|---|
| Product Name | Splice for Beam 95 |
| Specification | L260/L500 |
| Material | AL6005-T5(Anodized) |
| Accessory | Self-Tapping Screw ST6.3*19 |
| Package | L260: 27pcs/big carton; L500: 27Pcs/long carton |

Splice for Beam 95



Splice for Beam 105



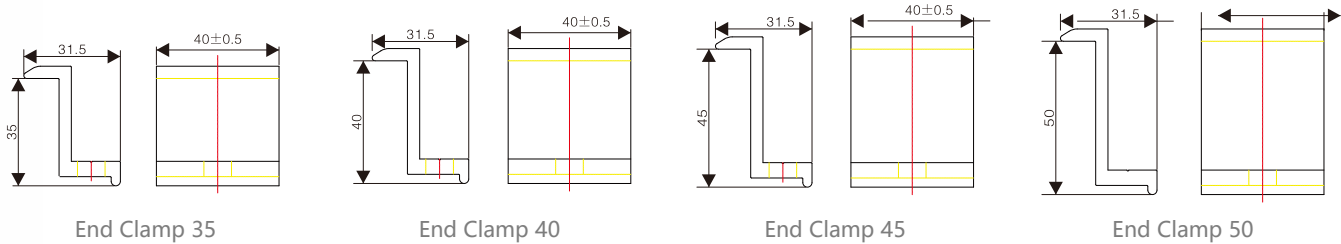
| | |
|---------------|---|
| Product Name | Splice for Beam 105 |
| Specification | L260/L500 |
| Material | AL6005-T5(Anodized) |
| Accessory | Self-Tapping Screw ST6.3*19 |
| Package | L260: 27pcs/big carton; L500: 27Pcs/long carton |

MRac® Universal Product-Clamp Kits

End Clamp Kit(CrossModule)

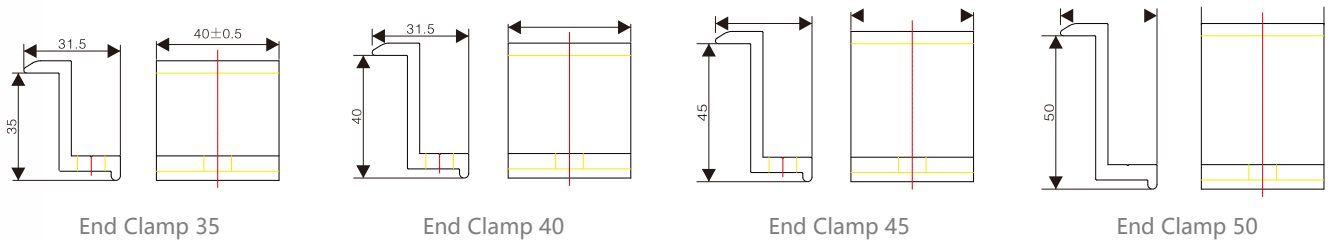


| | |
|---------------|--|
| Product Name | End Clamp Kit (CrossModule) |
| Accessory | EndClampKit (35、40、45、50) |
| | Cross Module、spring washerM8、 Hexagon Socket Head Bolt M8*25 |
| Specification | End Clamp 35 Kit; End Clamp 40 Kit; End Clamp 45 Kit; End Clamp 50 Kit |
| Package | 120pcs/small carton; 4small carton/big carton |



End Clamp Kit(Symmetrical Module)

| | |
|---------------|--|
| Product Name | End Clamp Kit(Symmetrical Module) |
| Accessory | EndClampKit (35、40、45、50) |
| | Symmetrical Module、spring washerM8、 Hexagon Socket Head Bolt M8*25 |
| Specification | End Clamp 35 Kit; End Clamp 40 Kit; End Clamp 45 Kit; End Clamp 50 Kit |
| Package | 120pcs/small carton; 4small carton/big carton |

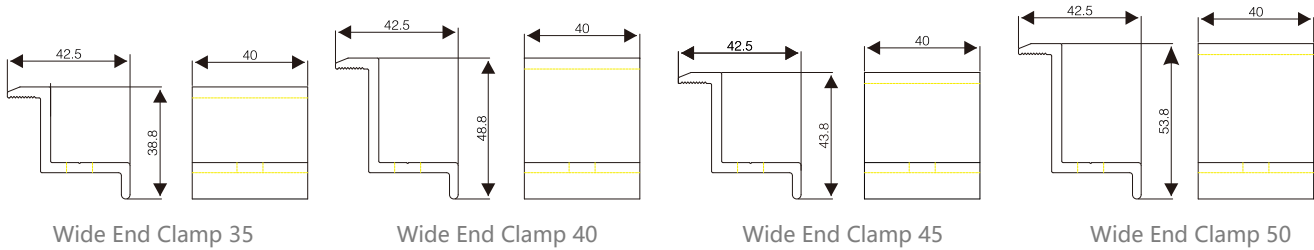


MRac® Universal Product-Clamp Kits

Wide End Clamp Kit(Cross Module)

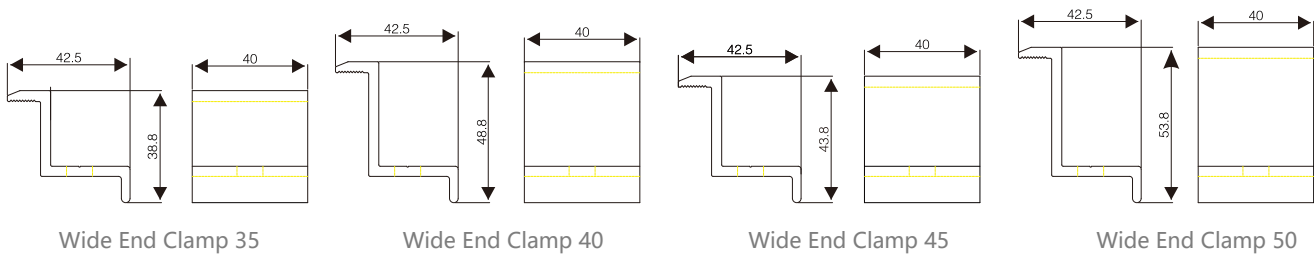


| | |
|---------------|--|
| Product Name | Wide End Clamp Kit(Cross Module) |
| Accessory | Wide End Clamp (35、40、45、50) |
| | Cross Module、spring washerM8、 Hexagon Socket Head Bolt M8*25 |
| Specification | Wide End Clamp 35 Kit; Wide End Clamp 40 Kit; Wide End Clamp 45 Kit; Wide End Clamp 50 Kit |
| Package | 120pcs/small carton; 4small carton/big carton |



Wide End Clamp Kit(Symmetrical Module)

| | |
|---------------|--|
| Product Name | Wide End Clamp Kit(Symmetrical Module) |
| Accessory | Wide End Clamp (35、40、45、50) |
| | Symmetrical Module、spring washerM8、 Hexagon Socket Head Bolt M8*25 |
| Specification | Wide End Clamp 35 Kit; Wide End Clamp 40 Kit; Wide End Clamp 45 Kit; Wide End Clamp 50 Kit |
| Package | 120pcs/small carton; 4small carton/big carton |

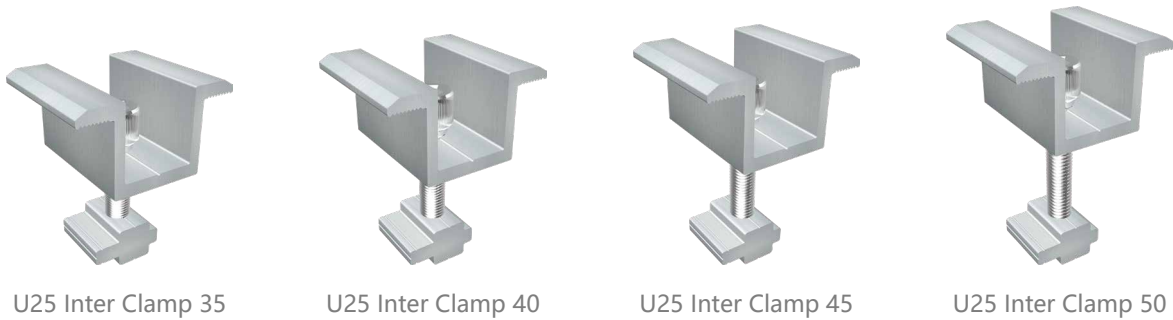


MRac® Universal Product-Clamp Kits

Inner Clamp Kit(Cross Module)



| | |
|---------------|--|
| Product Name | U25 Inter Clamp Kit (Cross Module) |
| Accessory | U25 Inter Clamp (35、40、45、50) |
| | Cross Module、spring washerM8、 Plain Washer M8、 Hexagon Socket Head Bolt (M8*35、 M8*40、 M8*45、 M8*50) |
| Specification | U25 Inter Clamp Kit 35, U25 Inter Clamp Kit 40; U25 Inter Clamp Kit 45, U25 Inter Clamp Kit 50 |
| Package | 90pcs/small carton, 4small carton/big carton; 80pcs/small carton, 4small carton/big carton |



Inner Clamp Kit(Symmetrical Module)

| | |
|---------------|--|
| Product Name | U25 Inter Clamp Kit (Symmetrical Module) |
| Accessory | U25 Inter Clamp (35、40、45、50) |
| | Symmetrical Module、spring washerM8、 Plain Washer M8、 Hexagon Socket Head Bolt (M8*35、 M8*40、 M8*45、 M8*50) |
| Specification | U25 Inter Clamp Kit 35, U25 Inter Clamp Kit 40; U25 Inter Clamp Kit 45, U25 Inter Clamp Kit 50 |
| Package | 90pcs/small carton, 4small carton/big carton; 80pcs/small carton, 4small carton/big carton |



MRac[®]

Universal Product-Clamp Kits

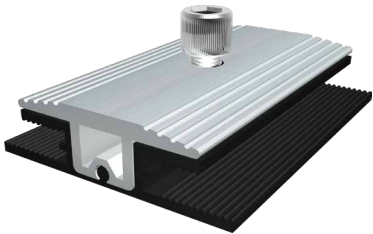
C Clamp Kit



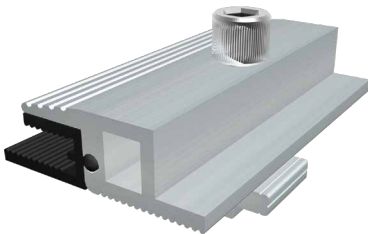
| | |
|--------------|---|
| Product Name | C Clamp Kit |
| Accessory | C Clamp 、 Cross Module、 spring washerM8、 Hexagon Socket Head Bolt M8*28 |
| Material | AL6005-T5(Anodized) |
| Package | 200pcs/small carton |
| | 4small carton/big carton |

Inter Clamp Kit for Thin Film Module

| | |
|--------------|--|
| Product Name | Inter Clamp Kit for Thin Film Module |
| Accessory | Inter Clamp for Thin Film Module、 Cross Module、 spring washerM8、 Hexagon Socket Head Bolt M8*35、 Rubber for Inter Clamp Kit for Thin Film Module L80 |
| Material | AL6005-T5(Anodized) |
| Package | 60pcs/small carton |
| | 4small carton/big carton |



Inter Clamp Kit for Thin Film Module



| | |
|--------------|--|
| Product Name | Inter Clamp Kit for Thin Film Module |
| Accessory | Inter Clamp for Thin Film Module、 Cross Module、 spring washerM8、 Hexagon Socket Head Bolt M8*35、 Rubber for Inter Clamp Kit for Thin Film Module L80 |
| Material | AL6005-T5(Anodized) |
| Package | 75pcs/small carton |
| | 4small carton/big carton |

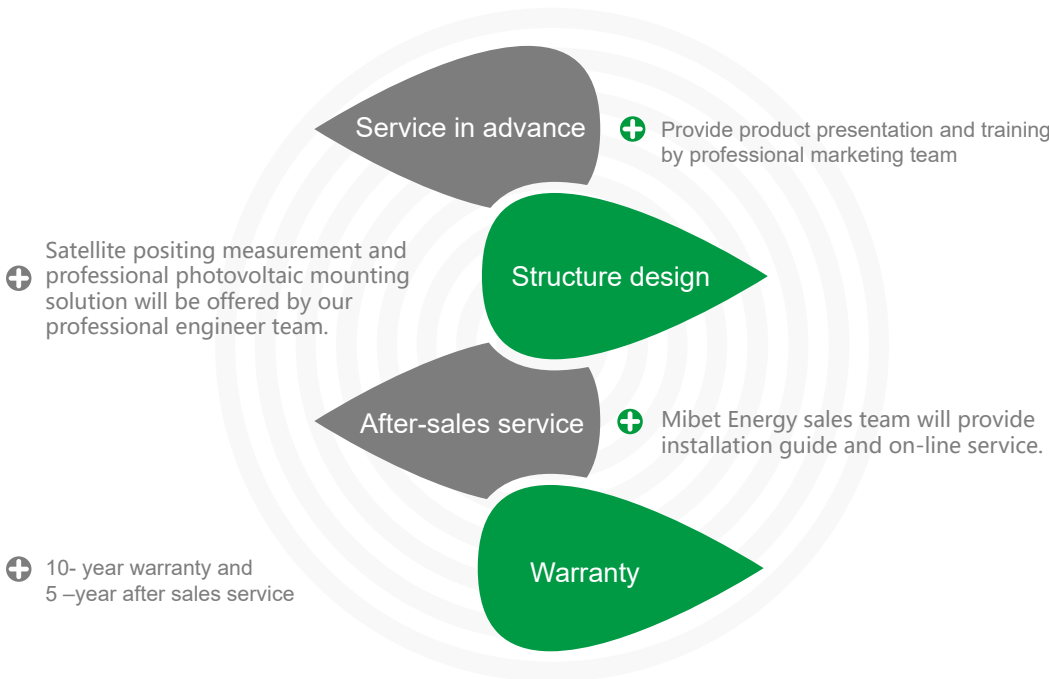


Declaration of 10-year Warranty



- Xiamen Mibet New Energy Co., Ltd. (hereinafter as “Mibet Energy”) warrants to the original purchaser (“Purchaser”) of product(s) that it manufactures (“Product”) at the original installation site that the Product shall be free from defects in material and workmanship for a period of ten (10) years, except for the anodized finish which shall be free from visible peeling, or cracking or chalking under normal atmospheric conditions.
- The after-sales service will not cover any man-made damage or any damage caused by the environment which is corrosive to solar mounting. Please read through the Cleaning and Maintenance Guide for Architecturally Finished Aluminum AAMA 609&610-02(please refer to www.aamanet.org). Mibet energy solemnly promises to offer after-sales services for damages, which is not made by men, during transport, storage, and installation.
- Mibet Energy will not be responsible for any damage during the installation caused by non-compliance with the installation guide, by any alteration, rework and modification unauthorized by Mibet Energy, or by any design defect of drawings provided by the customer
- Please ask the relevant suppliers for warranty declaration for other devices in solar system, e.g. solar modules and flashing.Mibet Energy is only responsible for solar mounting systems.

Support and Service



Notes

- For more information, call us or check on Mibet website
- The picture is only for reference, all right reserved by Xiamen Mibet New Energy Co.,Ltd.